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Industrial Canada

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Featured in this Issue

The British West Indies as a Market for
Canadian Manufactured Products.

Prospects for Canadian Trade in Colombia
and Venezuela.

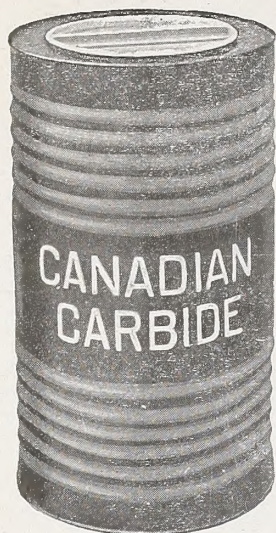
The Truth about Russia as narrated by a
Former Sympathizer with Soviet Ideas.

A Review of Business Conditions in Canada
and other Countries of the World.

The Usual Series of Informative Articles
supplied by Departments of the C.M.A.



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HEAD OFFICE TORONTO BRANCH OFFICES MONTREAL, HAMILTON, WINNIPEG, VANCOUVER, AMHERST & OTTAWA



Canadian Carbide

HC

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no. 5, 7-8

Made in Canada

SOLD THE WORLD OVER

Second to None in

QUALITY, GAS YIELD
AND PACKAGE

MANUFACTURED BY

Works:
St. Catharines, Ont.
Shawinigan Falls
Que.

Canada Carbide Company, Limited
MONTREAL - CANADA

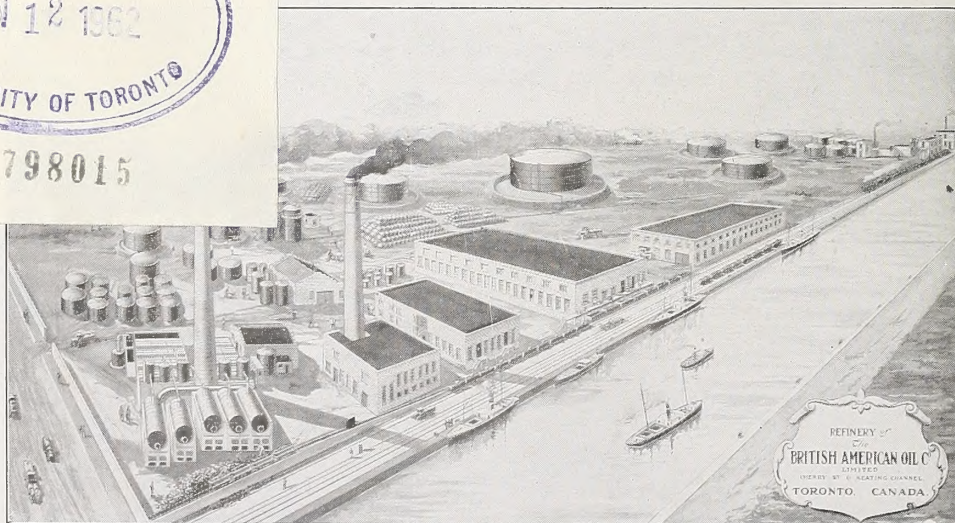
THE BRITISH AMERICAN OIL CO., LIMITED

MANUFACTURERS—DISTRIBUTORS

Kerosene—Industrial Lubricants—Paraffine Wax
Fuel Oil—Road Oils—Petroleum Coke

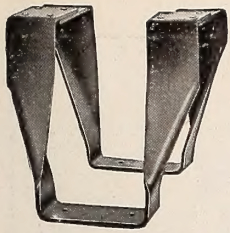


Oshawa
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Orillia
St. Catharines
etc.



Western Branches:
Winnipeg
Brandon
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Also One Hundred and Twenty Distributing Stations in Ontario, Quebec, Manitoba, Saskatchewan and Alberta
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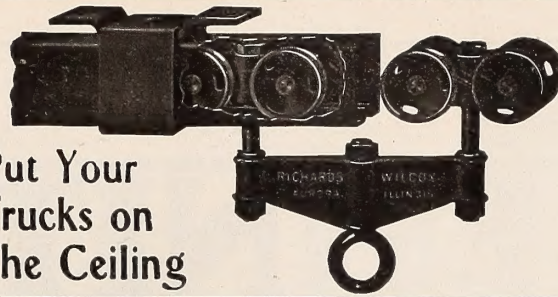


**BULLDOG STEEL
JOIST HANGERS**

They never let go! Stronger than malleable. All sizes and styles for all kinds of work. Save space and time in erection.

GARAGE DOOR HARDWARE OF ALL KINDS FOR ANY PURPOSE

Angle Doors, Parallel Doors etc. Special jobs receive the prompt attention of our engineering department. Let us know your requirements.



**Put Your
Trucks on
The Ceiling**

**The Modern Method of Factory
Transportation**

A Richards-Wilcox Carrier System—either I-Beam or Trolley—will pay for itself in one year on actual pay-roll saving, not to mention the increased efficiency. Occupies no floor space. Always ready for use. Operates easily, one man can handle 2,500 lbs. Trolley carriers made in sixteen styles and sizes for loads up to 2,500 lbs. For heavier loads use I-Beam Equipment.

CATALOGS UPON REQUEST

Richards-Wilcox Canadian Co. Ltd.

AURORA
BOSTON
NEW YORK
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London Ontario

"A hanger for any door that slides"

PHILADELPHIA
MINNEAPOLIS
SAN FRANCISCO
ST. LOUIS

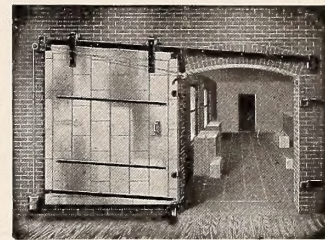


"R-W"
TROLLEYS
ARE BEST
FOR ALL
SLIDING
DOORS

Specified by leading architects and engineers throughout Canada and the United States. "A hanger for any door that slides."

**FIRE DOORS AND FIRE
DOOR HARDWARE WITH
UNDERWRITERS' LABEL**

All styles, single or double, sliding or swinging. A fire door with labeled hardware is the surest way to prevent fire from spreading.



**Paint and Varnish Will Protect Your
Factory Wall and Floor From Decay**

"Save the surface and
you save all" *Paint & Varnish*

**Maple Leaf
Mill White**

on ceilings and interior
walls will increase your
lighting efficiency.

Quality Lines of Surface-Savers for Your Factory Premises:

CEMLITE—for cement surfaces.

BARN PAINT—for sheds and warehouses.

FERROS—for steel construction in acid plants, water towers, etc.

GALVANO—primer for galvanized sheet iron construction.

ELASTIC CARBON PAINT—for roofs, smoke stacks, etc., where frequent renewal is required.

WAX OIL—for office and warehouse floors.

THE IMPERIAL VARNISH & COLOR CO. LIMITED
HEAD OFFICE **TORONTO** CANADA
MONTREAL **WINNIPEG** **VANCOUVER**

REFINITE

RIVAL OF THE CLOUDS
TRADE MARK

NATURE'S WATER SOFTENER

TRADE MARK REGISTERED

Investigation Proves Its Superiority

WHENEVER forethought and serious investigation are employed in considering the claims of Water Softening Systems, REFINITE is invariably accepted as the superior. The fact that REFINITE mineral is a *natural* Water Softener is of prime importance. No other water softening system has REFINITE mineral. The working mines and untouched deposits are the exclusive property of the Refinite Company.



Actual Size of REFINITE Mineral Grains

This is a photographic reproduction of REFINITE Water Softening mineral. REFINITE is a *natural* water softener—not an artificial or chemical product. Note especially the large size of the grains. No gravel bed is needed, hence more mineral can be used. This means longer service without regenerating. Furthermore, no mineral is lost in cleaning

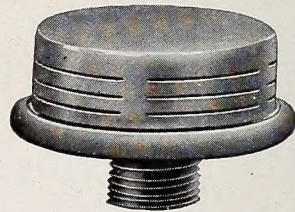
Every feature of construction in REFINITE Water Softening Systems is *better*, because the priceless possession we have in Refinite mineral demands a practical system built of the highest grade material. No makeshift will do! Refinite has set a standard by which all other water softening systems are judged.

Owners of Refinite Water Softening Systems know they have the *best*! Let their testimony be your guide in deciding on the system you should install. The economy and convenience of soft water is appreciated by everyone, especially for use in laundries, hotels, hospitals, textile mills, etc. Your one problem is to install the *Best*!

Write for Free Booklet and complete information. Address office nearest you, or phone if convenient. Asking for the full details does not obligate you in any way.

We also manufacture Booth Lime-Soda Softeners and Refinite Rapid Pressure Filters.

Ask Dun or Bradstreet About Us



This is the Patented REFINITE Strainer Valve, scientifically made to withstand action of salt and water. An *exclusive Refinite patent*

THE REFINITE COMPANY of CANADA; LIMITED

HEAD OFFICES: 319 CONTINENTAL LIFE BUILDING
TORONTO, CANADA

OMAHA

CHICAGO

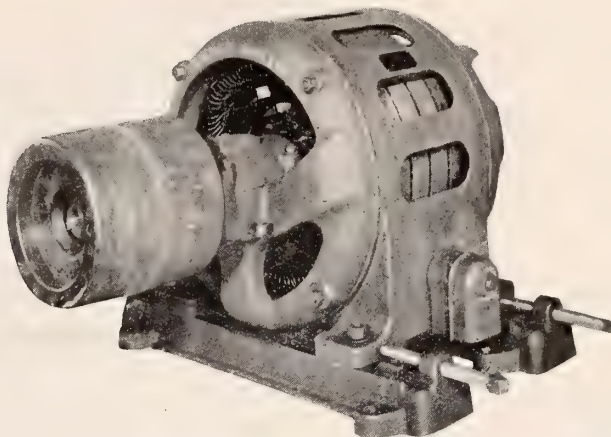
NEW YORK

SAN FRANCISCO

Use better motors from now on—

The keener and more critical your electrical expert is, the better he will like Canadian Crocker-Wheeler motors.

Crocker-Wheeler design and construction ensures greater efficiency, longer life, fewer repairs. These are provable facts.



Canadian Crocker-Wheeler Induction Motor with
"Cast Welded" Rotor construction.
30 h.p., 750 r.p.m., 25 cycles.

Canadian Crocker-Wheeler Apparatus and Service are to be
had at all the branches of the
Montreal Halifax Ottawa Toronto London
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Northern Electric Company
LIMITED

THE CANADIAN
CROCKER-WHEELER COMPANY
LIMITED

HEAD OFFICE AND WORKS: ST. CATHARINES ONT. MANUFACTURERS AND ELECTRICAL ENGINEERS DISTRICT OFFICES: TORONTO & MONTREAL

DART UNION PIPE COUPLINGS

Positively

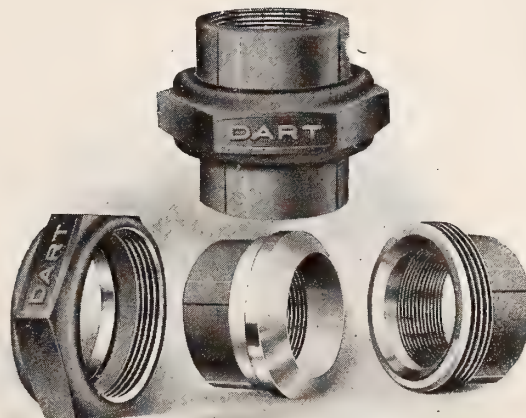
WILL NOT LEAK

The use of Dart Unions is a Guarantee that the Joints will Stay Tight

Dart Union Pipe Couplings stay tight because of the Bronze to Bronze face and seat which cannot rust or corrode, and the extra heavy iron parts which will stand without any signs of stretching or pulling apart.

YOUR JOBBER SELLS THEM

Dart Union Co., Limited, Toronto



You Need a GOOD Die Stock Set

if you need one at all.

Because a **GOOD** Die Stock Set embodies:

1. Accuracy in its product.
2. Adjustment for wear.
3. Free cutting qualities.
4. Provision for sharpening.
5. Ample adjustment for oversize or undersize.

P. & W. Die Stock Dies ARE GOOD DIES.

BETTER than most because of the interchangeable feature in their chasers. A broken chaser in a P. & W. Die doesn't mean a new set of chasers. You can get a new chaser to replace a breakage and the new one "fits in" perfectly in your old set. That's the 6th point, "**ECONOMY IN OPERATION.**"

**PRATT & WHITNEY COMPANY
OF CANADA, LIMITED**

Works : Dundas, Ontario

MONTREAL
723 Drummond Bldg.
VANCOUVER
B.C. Equipment Co.

TORONTO
1002 C. P. R. Bldg.
WALKERVILLE
103½ Sandwich St.

WINNIPEG
1205 McArthur Bldg.
HALIFAX
Roy Building



PRATT & WHITNEY

COPPER and BRASS

SHEETS : TUBES : RODS
COPPER ELECTRICAL BUS BAR

We Carry a Large Stock of Assorted Sizes
and cut up to sizes required

Prompt Shipment from Stock
Write Us Your Requirements

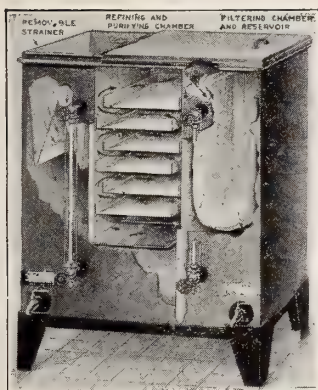
The Booth-Coulter Copper & Brass Co.

"The Copper and Brass People"

LIMITED

115 SUMACH STREET

TORONTO, ONTARIO



WRITE FOR
ILLUSTRATED BOOKLET C-17

Increase Production— Reduce Expense

Operators of Power Plants and Engine Rooms and other machinery for which Lubrication Systems are required report savings in lubrications costs of as high as 60% when they filter their oil. Filtration makes it possible for them to use the same oil over and over again.

Many have found the solution of these filtration problems in Bowser Filtration Equipment, because Bowser not only greatly reduces the necessary amount of oil used, but keeps it *pure and clean*.

Thus the Bowser System reduces operating expenses and increases production.

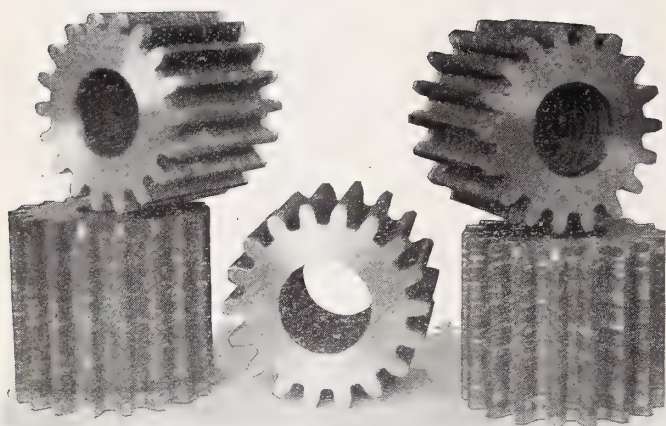
That's why Bowser Equipment will be a profitable investment for you.

Bowser Equipment is MADE IN CANADA
by

S. F. Bowser Co. Ltd., 66 Fraser Ave., Toronto, Ont.

BOWSER
ESTABLISHED 1885

Silent Pinions of Rawhide



The modern drive is direct from motor to machine with Rawhide Pinion and accurate cut gear.

Hamilton Gear and Machine Co.

Van Horne St., TORONTO

Massey-Harris



An Engine You Can Depend On

The Massey-Harris Engine can be depended on to give all the year 'round service in any kind of weather at minimum cost, because it's designed on scientific principles and every part built to stand up and wear long.

Think what these features mean :

- Simple in operation.
- A Simple and Efficient Carburetor gives a perfect mixture in any kind of weather.
- Effective Governor — No charge or spark on Idle Stroke.
- Valves Easily Removable.
- Large Water Space surrounding Cylinder.
- Safe Gasoline Storage in the substantial Cast-Iron Base.

Write for more detailed description of the Massey-Harris Gasoline Engine.

*Made in Sizes to deliver from
2 to 15 H.P.*

MASSEY-HARRIS CO., Limited

Head Office—Toronto, Canada

Canadian Branches at—

Montreal Moncton Winnipeg Regina Saskatoon
Swift Current Yorkton Calgary Edmonton

AGENCIES EVERYWHERE

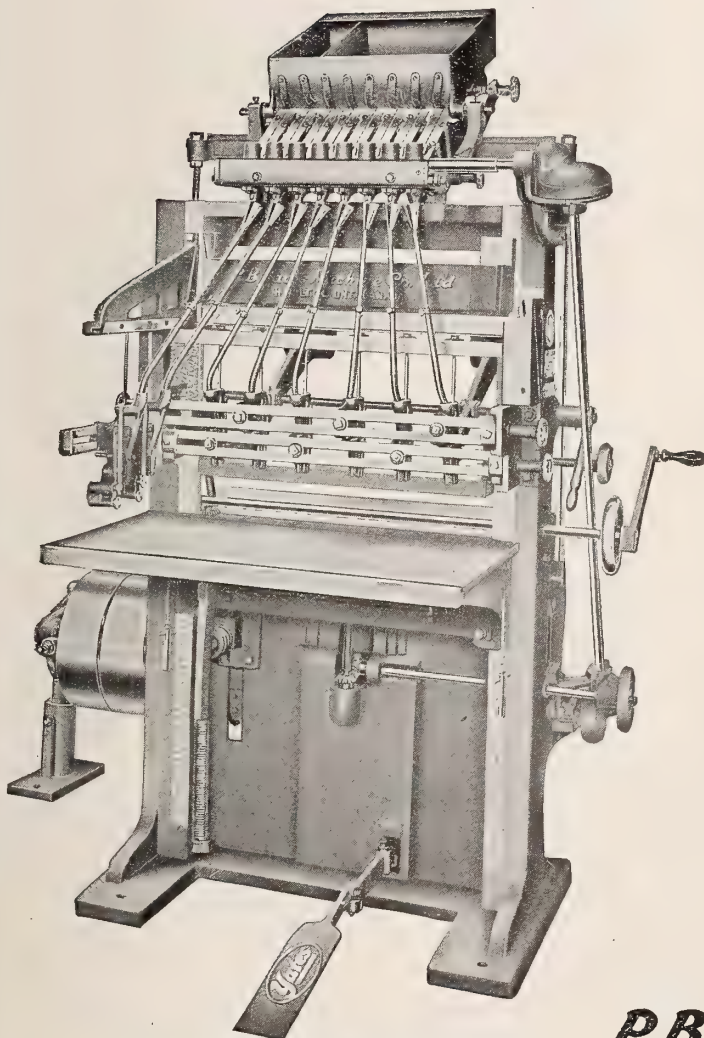
Nailing Machines

are one of the most useful machines
in your plant, especially



Open Back Nailers

with Side Arm Attachment



Yates Nailing Machine No. 830
Open Back - Side Arm

DID you notice the Side Arm attachment on machine as shown at the left? With this attachment you can nail together at the same time sides and ends of boxes or crates. A Nailing Machine is a real labor saver.

Yates Nailers are strongly built for heavy continuous service. Let us send you further particulars and show you at what value a Nailer could be in your plant.

WRITE US

P. B. Yates Machine Co. Ltd.

Hamilton, Canada



Throw Away Files —Not Time

When you use a file that has become dull, you are wasting time.

To give efficient service a file's teeth must bite keenly at every stroke.

Throw away that dull file and get a new one. Files cost less than labor.

Maximum service from every file is assured if you specify one of these brands:

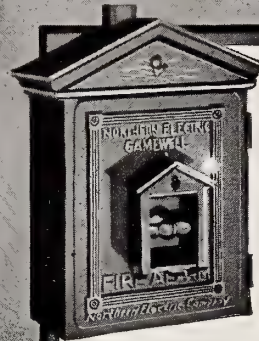
**KEARNEY & FOOT
GREAT WESTERN
AMERICAN
ARCADE
GLOBE**

Files and Rasps

Made in Canada by

**Nicholson File
Company**

PORT HOPE, ONTARIO



Why Risk a Delayed Alarm ?

Your valuable property needs the utmost in protection when fire starts. The slightest delay in sending in the alarm may prove disastrous. A

Northern Electric Gamewell Fire Alarm System

in your plant connects with the street box and signals the Central Fire Station the instant one of its boxes is pulled.

Automatic, accurate and instantaneous, it is the one positive method of bringing the Fire Brigade to your aid without waste of time or confusion. It saves seconds when seconds means lives and money.

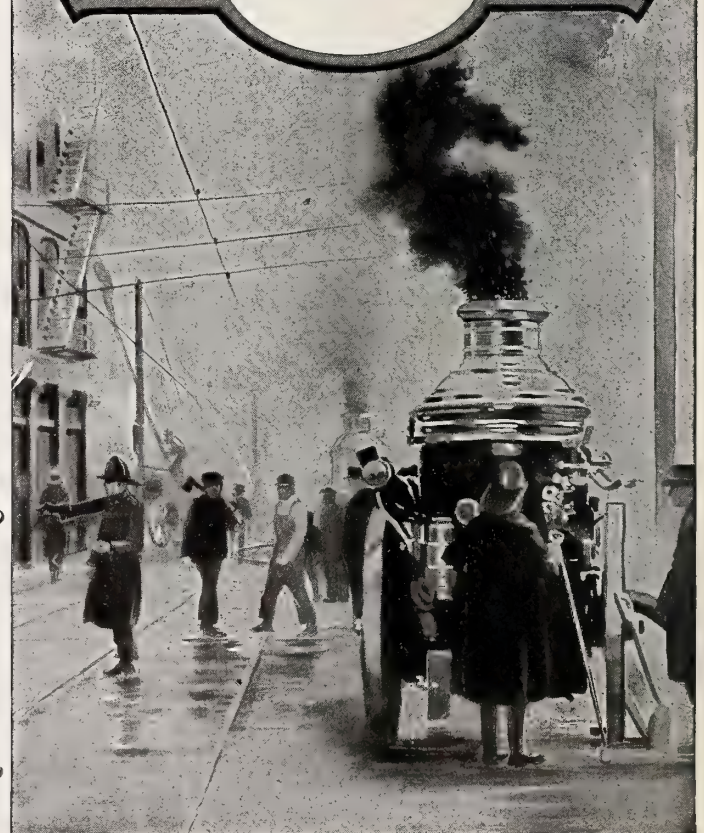
*Write our nearest house for timely
Fire Alarm Literature*

Northern Electric Company
LIMITED

Montreal
Halifax
Quebec
Ottawa

Toronto
Hamilton
London
Windsor
Winnipeg

Regina
Calgary
Edmonton
Vancouver



OPEN HEARTH STEEL SHEETS



Blue Annealed and One Pass Cold Rolled Box Annealed

Produced, from
iron ore to the
finished product,
in our own plant



Submit your
specifications.
Shipment can be
made promptly

HAMILTON

MONTREAL



THE NORDHEIMER BUILDING, TORONTO

Architect—F. H. Herbert



Add Character— At No Higher Cost

THE Nordheimer Building in Toronto secures no small part of its quality atmosphere through the use of Crittall Universal Casements.

This fine, attractive building well illustrates the adaptability of Crittall Casements—their simplicity and convenience—their distinctive character.

Many of the finest and best-known business structures of recent years have been equipped with these modern windows—not merely because of the material and artistic advantages secured,

but also because they cost practically no more than wooden sash.

Their rigidity, durability and low cost of upkeep actually make Crittall Casements cost less in the end.

Learn more about the advantages of Crittall Universal Casements. Write for photographs, literature, etc. Have a representative call and tell you all you want to know.

CANADIAN METAL WINDOW & STEEL PRODUCTS LIMITED

OFFICE AND FACTORY—160 RIVER ST., TORONTO

MONTREAL OFFICE—169 PEEL STREET

AGENCIES: R. R. Power, Metropole Building, HALIFAX, N.S.; R. N. M. Robertson, P.O. Box 1053, ST. JOHN, N.B.; W. J. Banks, St. John Street, QUEBEC, P.Q.; R. Y. Kilvert & Co., 402 Builders Exchange, WINNIPEG, Man.; A. L. Charlebois, Ave. J. & 20th Street, SASKATOON, Sask.; Gorman's Limited, EDMONTON, Alta., CALGARY, Alta., VANCOUVER, B.C.



Making a Good Start

Many a day has been spoilt by a bad start! In these days of keen competition, we must be certain that we begin right. The efficiency of the factory should begin in the cloak room. It should be in harmony with the modern machinery in the workroom.

When you hang your coat on a hook with a number of other employees, you never know whether it will be knocked down or taken by mistake. This uncertainty affects your work. Make a workman's personal property safe and you ease his mind thus securing more interest in his work.

The "Meadows Clothes Lockers" are made of sheet steel, and are scientifically designed. The parts are securely welded and enameled, thus forming an attractive and permanent fixture.

Let us know how many employees you have, and we will inform you of the cost and space required for installing an efficient Cloak Room that will repay you in more and better products.



Meadows' Steel Lockers in Factory of
C. S. Hyman, London, Ont.

GEO. B. MEADOWS, *Limited*

Makers of Wire, Iron, Steel and Brass Goods

479 WELLINGTON ST. W.

TORONTO, ONTARIO

Before the Days of Dollars and Cents.

If it seems difficult in this day to turn our Canadian dollars into terms of pounds, shillings and pence, imagine the confusion back in 1858 when the Canadian Government adopted the decimal system and business first had to be done on the dollars and cents basis. One of the first commodities to be bought for the new money--the now familiar dollar--was Macdonald's tobacco.

For at that early date was also established by Macdonald's a new standard in tobaccos which has become almost as familiar to Canadians as the currency itself.

The Tobacco with a heart

MACDONALD'S

CHEMICAL PLANT, SANDWICH, ONT.

Unvarying Quality

Every ounce of Windsor Brand Chemicals is of the same high quality.

Caustic Soda Bleaching Powder OR Chloride of Lime

For years the Windsor standard of purity and excellence has been consistently maintained by skilled chemists in Canada's finest chemical plant.

Your orders carefully and promptly attended to.

THE CANADIAN SALT CO., LIMITED

WINDSOR, ONTARIO

Jefferson

MADE IN CANADA

Illuminating Glassware for Every Purpose

Our line comprises over 3000 designs, sizes and decorations

There is no glass for lighting requirements that
we cannot supply

CATALOGS ON REQUEST

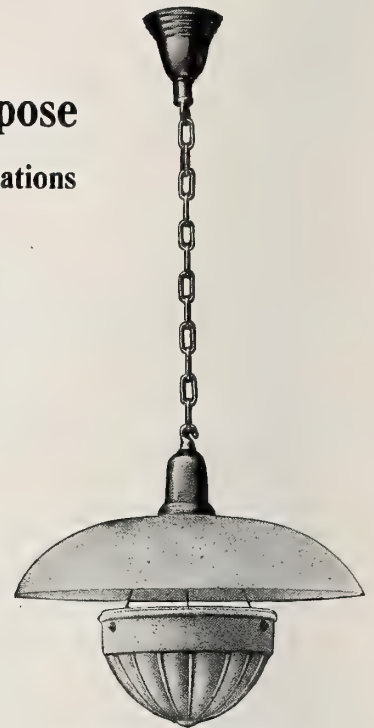


JEFFERSONLITE

Pressed Tableware
Tumblers, etc.
Restaurant Glassware
Confectionery Glassware
Hotel Glassware
Soda Fountain Glassware
Graduates
Medicine Glasses
Oil Lamps and Founts
Auto Lens
Railway Lens
Railway Globes
Ash Trays



DUSTPROOF



DOMINIONLITE

Battery Jars
Lightning Rod Balls
Heat Resisting Door Plates
Cigar Lighter Globes
Votive Cups
Vault Lights
Window Prisms
Door Knobs
Ash Tray Liners
Butter Liners
Bird Baths, Bird Seed Cups
Specialties

ENQUIRIES SOLICITED FROM MANUFACTURERS

JEFFERSON GLASS COMPANY, Limited

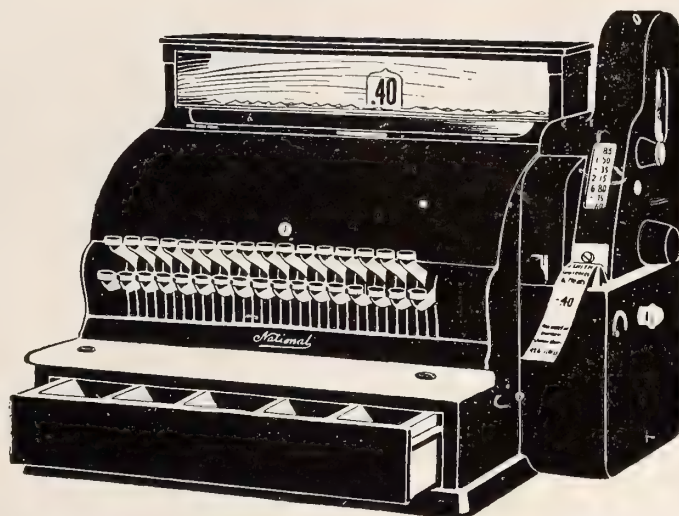
Head Office and Factory, 388 CARLAW AVENUE, TORONTO

Montreal, 285 Beaver Hall Hill

Winnipeg, 272 Main Street

Vancouver, 510 Hastings Street W.

Another improvement in National Cash Registers. Low-priced receipt printer.



To all merchants:

When you press a key on this register—

- (1) It shows the price of the article.
- (2) It prints a record for the merchant.
- (3) It prints this receipt for the customer. →
- (4) It opens the cash drawer.
- (5) It adds up the money received for the day.

J. BLANK
214 Main Street
Blankville

-.40

Amount of
Purchase Shown
Above

05 SEPT 10

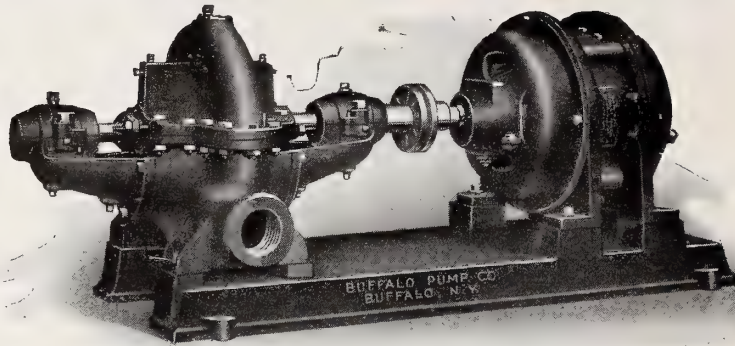
Copy of receipt printed for
each customer

Now there is a receipt-printing National Cash Register for every line of business.

Old registers bought, sold, repaired, and exchanged.
Easy payments. Liberal allowance for old registers.

We make cash registers for every line of business
NATIONAL
CASH REGISTER CO.
OF CANADA LIMITED

"CANADIAN" DOUBLE SUCTION SINGLE STAGE CLASS "S" CENTRIFUGAL PUMPS



*Long
Life*

Reliability

Economy

*Efficient
Service*

"Canadian" class "S" double suction impeller single stage centrifugal pumps embody all the latest and best features of centrifugal pump design. This type of pump is built single stage only with horizontally divided casing and double suction impeller. These pumps are offered for capacities from 15 to 75,000 gallons per minute, and for heads as high as 180 ft. They are especially designed for direct connection to motors and steam turbines, and can also be furnished for pulley drive. Can be built for right and left hand rotation.

These pumps are recommended for almost any service where clear water is being handled. High efficiency and absolute reliability are assured when you install one of these units.

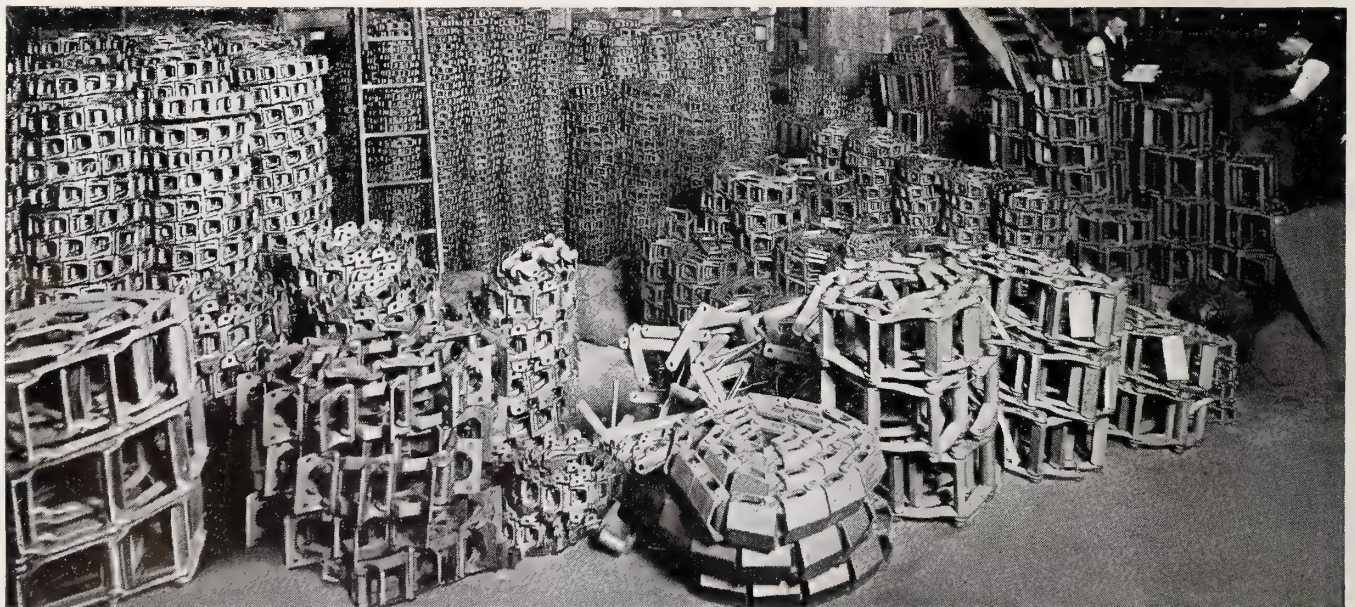
Every pump is tested for actual operating conditions before leaving factory.

Canadian Blower and Forge Co.
KITCHENER, ONT.

LINK-BELT CHAINS FOR ELEVATING, CONVEYING AND POWER TRANSMITTING

The wide variety of Link-Belt Chains, their high quality standard, and the service we maintain by carrying large stocks at our plant and dis-

tributing points, are reasons why you should standardise on Link-Belt Chains. Send for revised Price-List Catalog No. 334.

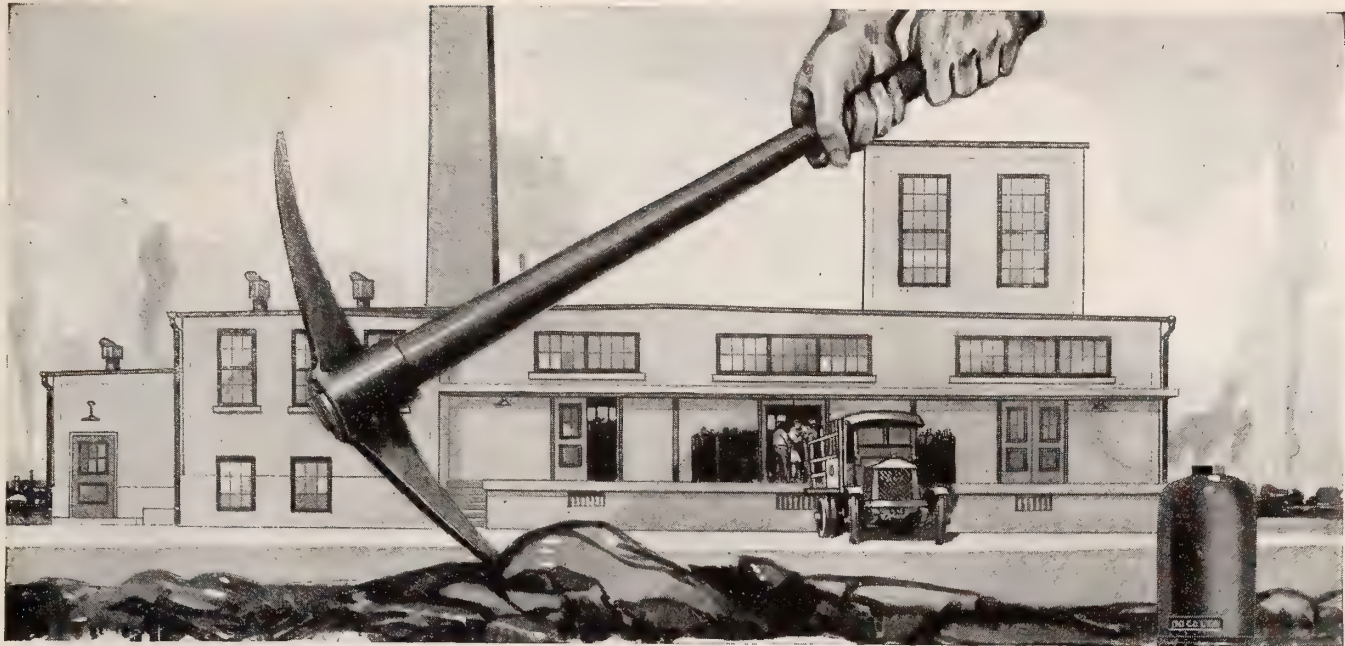


744

CANADIAN LINK-BELT COMPANY, LIMITED

Toronto, Wellington and Peter Streets

Montreal, 10 St. Michael's Lane



Building for Bigger Business

DOMINION OXYGEN has won such preference everywhere in Canada that the Dominion Oxygen Company Limited is constructing another plant with all possible speed at Montreal.

This manufacturing unit will have a producing capacity again as large as that of our plant in Toronto, and will provide facilities for even quicker and better service than heretofore.

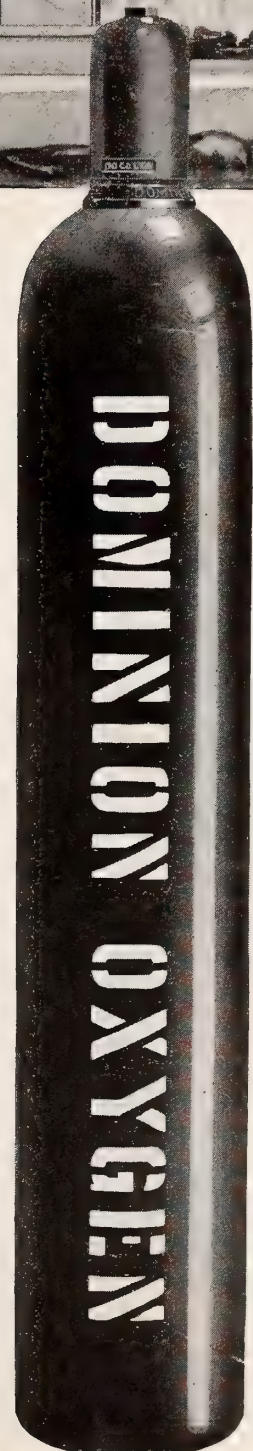
With twice the output of this uniformly pure oxygen to take care of constantly increasing demands, ample reserves will be maintained at all times at our various distributing stations to insure immediate supply for your needs — whether you require one cylinder or hundreds.

No matter where your location—at nearby industrial centers or miles away on remote and isolated jobs—forward your order to the nearest of our six plants and distributing stations and it will be filled on the day it is received.

Dominion Oxygen Co., Limited

Hillcrest Park, Toronto

Hamilton, Merritton, Montreal, Welland, Windsor.



D21

"Built by Dodge"

Seven generators connected by Dodge Rope drives direct to the turbine shafts; this was the way "Dodge" solved the problem for one light and power company.

If you were to read a list of central stations using power harness "built by Dodge" you would see represented many of the most important ones in America.

"Built by Dodge" has meant entire installations weighting millions of pounds and costing thousands of dollars; again that mark of superiority attaches itself to a single pulley, a clutch, a hanger, a bearing, a coupling or a collar; equal quality, equal value applying in either case. Everything for the mechanical

transmission of power is "built by Dodge"; each product carrying the basic thought, conservation of energy.

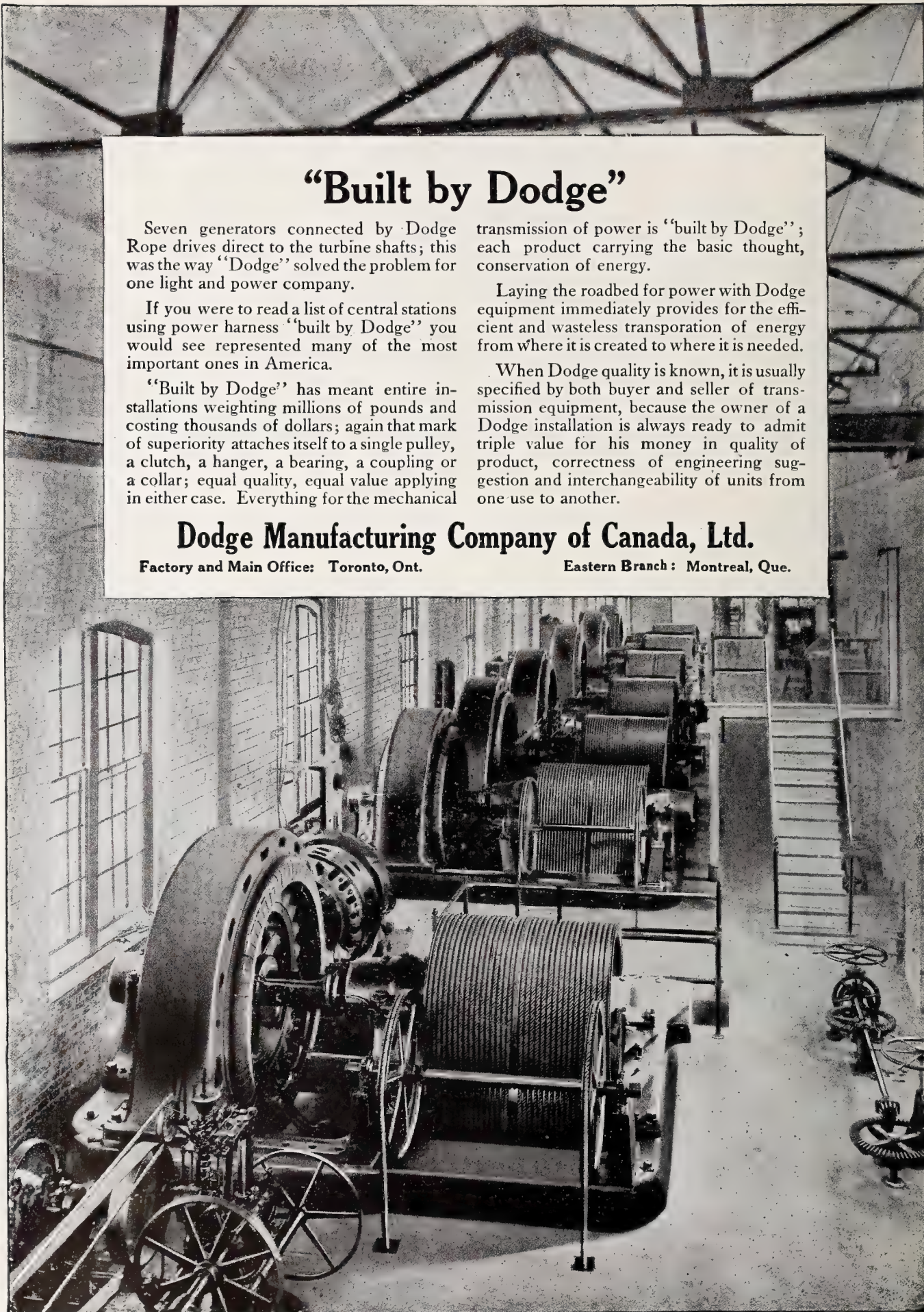
Laying the roadbed for power with Dodge equipment immediately provides for the efficient and wasteless transporation of energy from where it is created to where it is needed.

When Dodge quality is known, it is usually specified by both buyer and seller of transmission equipment, because the owner of a Dodge installation is always ready to admit triple value for his money in quality of product, correctness of engineering suggestion and interchangeability of units from one use to another.

Dodge Manufacturing Company of Canada, Ltd.

Factory and Main Office: Toronto, Ont.

Eastern Branch: Montreal, Que.



When the G.M. Talks to the P.S.



IMPERIAL Lubricants

*For Manufacturing,
Mining and Milling*

CYLINDER OILS

Imperial Cylinder Oil
Imperial Valve Oil
Imperial Capitol Cylinder Oil
Imperial 20th Century Cylinder Oil
Imperial Beaver Cylinder Oil

ENGINE AND MACHINE OILS

Imperial Solar Red Oil
Imperial Atlantic Red Oil
Imperial Renown Oil
Imperial Bayonne Engine Oil
Imperial Polar Machine Oil
Imperial Ario Compressor Oil

ALSO

Imperial Black Oils
Imperial Cutting Oils
Imperial Tempering Oils
Imperial Cordage Oils
Imperial Wool Oils
Imperial Greases.

When the General Manager talks to the Plant Superintendent, this year, more than ever, production costs is the question discussed and **correct lubrication** receives the careful consideration its importance merits.

There is an Imperial Lubricant which insures correct lubrication for every machine in every type of industrial plant. The line is a varied one but all Imperial Lubricants are alike in high quality. Their use insures low production costs and maximum economy in plant lubrication.

Imperial Lubrication Engineers will be glad to advise regarding any lubrication problem. Write to 56 Church Street, Toronto.

IMPERIAL OIL LIMITED

Branches in All Cities



Emblem of Integrity

Standard of Excellence

OXYGEN ACETYLENE BLOWPIPES-REGULATORS FILLING RODS - FLUXES ACCESSORIES

THE LIQUID AIR CO

SOCIÉTÉ L'AIR LIQUIDE

FACTORIES FOR SERVICE

HALIFAX, THREE RIVERS, MONTREAL, TORONTO,

LONDON, SUDBURY, WINNIPEG, CALGARY, VANCOUVER.

OPERATED IN CONJUNCTION WITH A CONTINENT WIDE NET-WORK OF DISTRIBUTION STATIONS



"LIQUID AIR" OXYGEN MEANS A SAVING IN TRANSPORTATION

With a network of Factories, not only planned but in actual operation, and a number of Distribution Stations situated at all large centres all over Canada, purchasers of Oxygen can obtain their supplies at a point very near to the point of consumption. This completely obviates heavy freight charges on cylinders, and assures an immediate supply at any time within a few hours, and even minutes, after the orders are placed. All cylinders conform to the specifications of the Canadian Railroad Board and are made to ensure safety without unnecessary weight. When purchasing "Liquid Air" Oxygen, you not only save on freight, but in very many cases this expense is almost eliminated.



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and see that it
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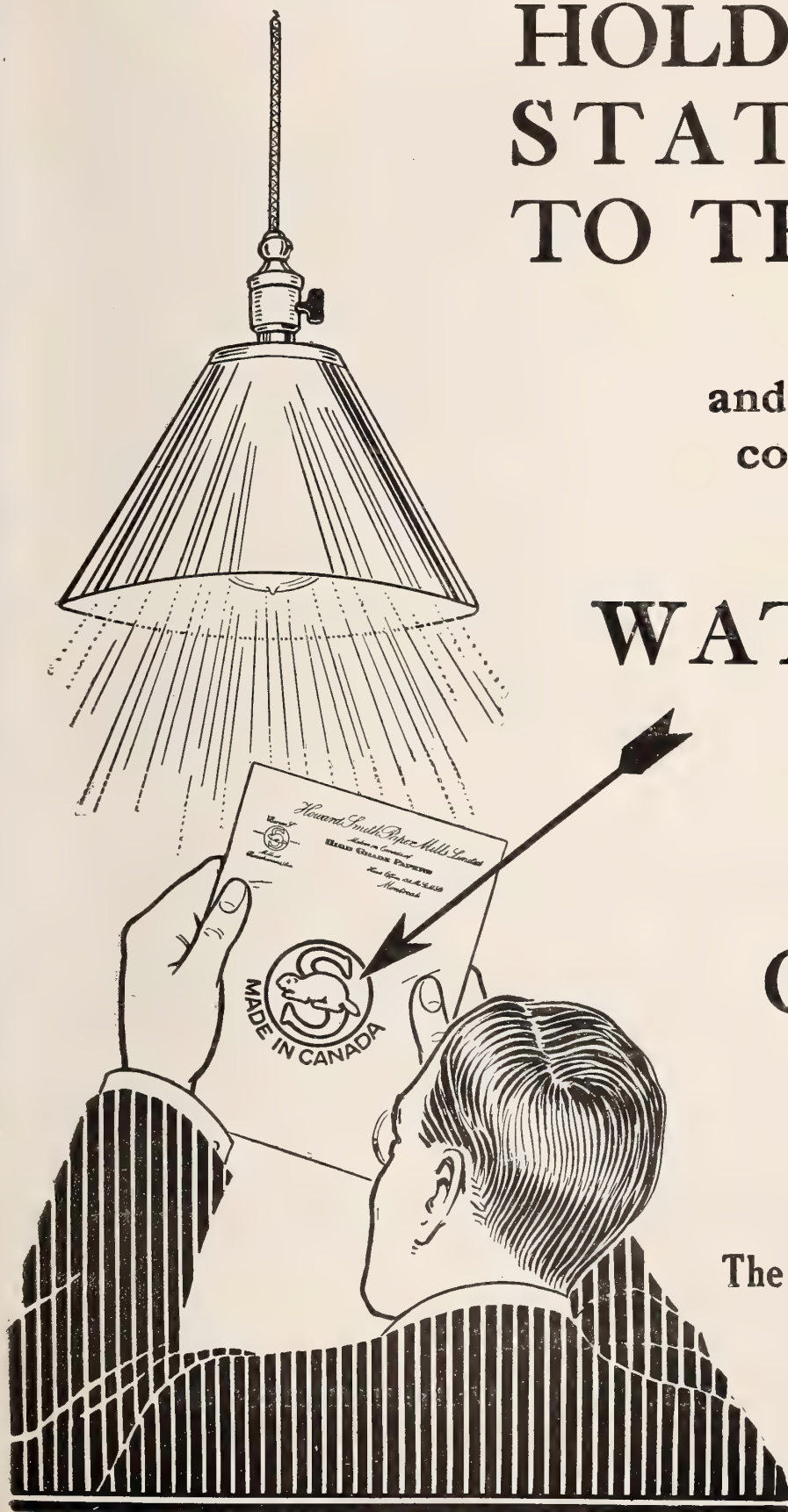
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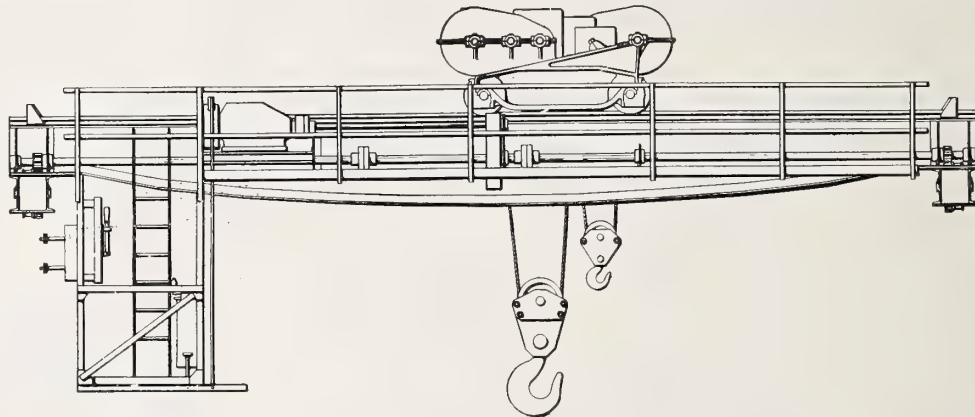
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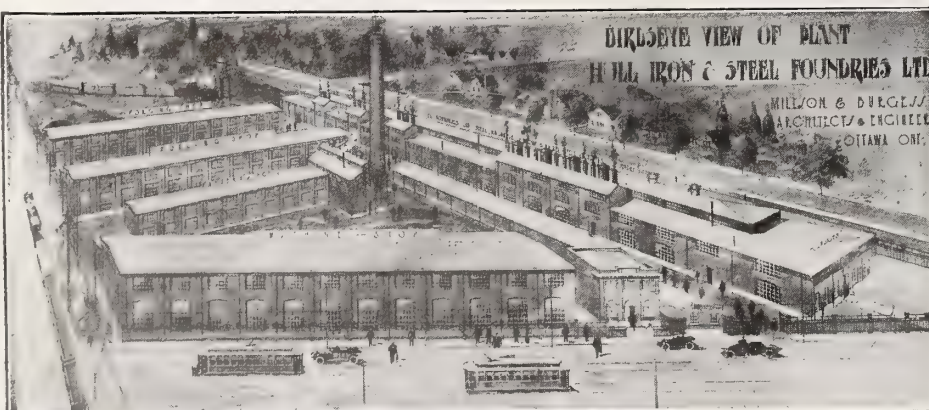
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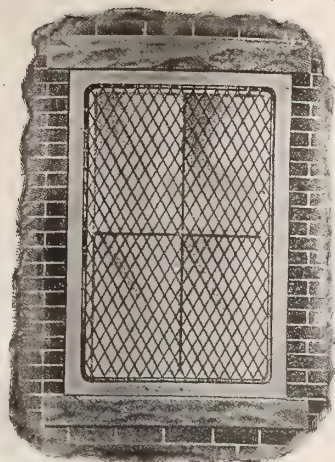
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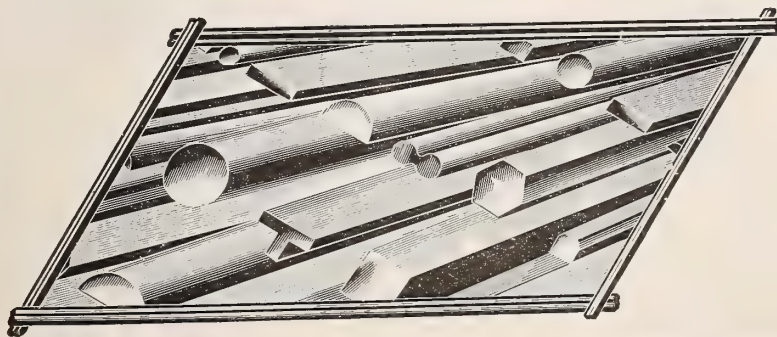
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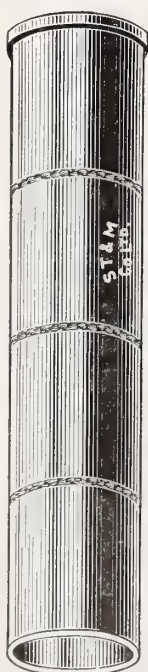
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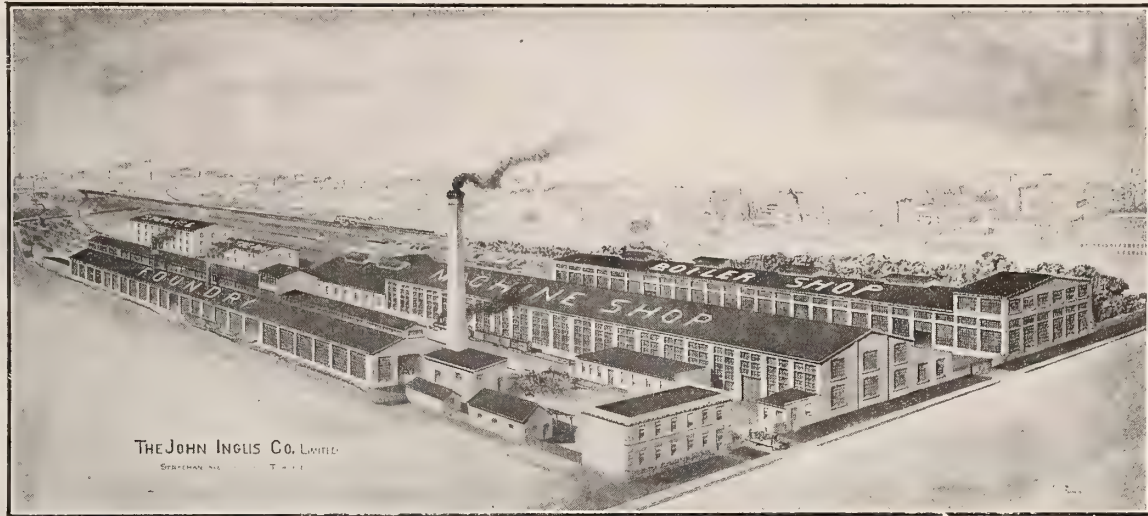
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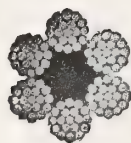
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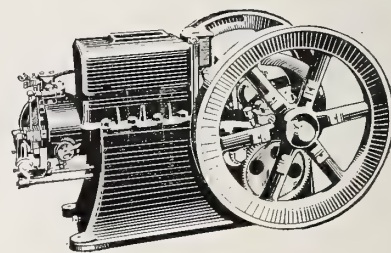
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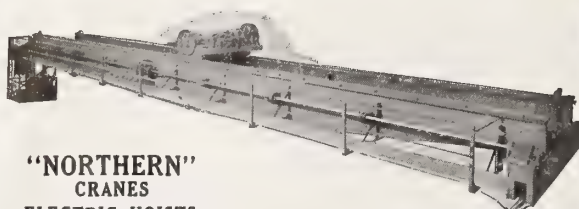
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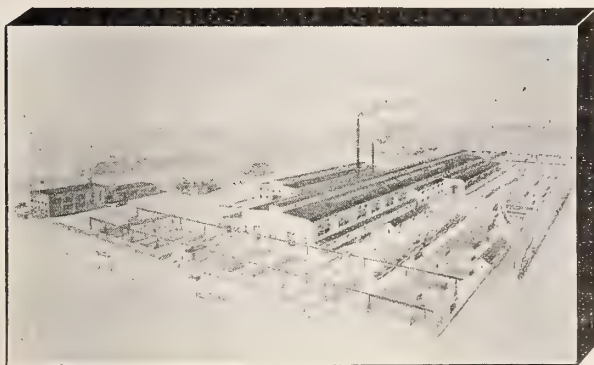
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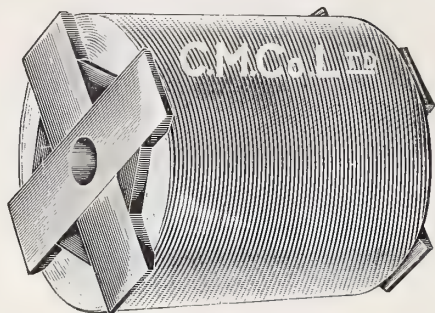


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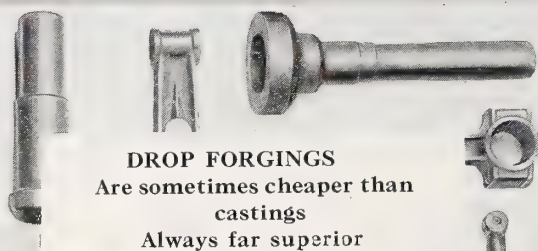
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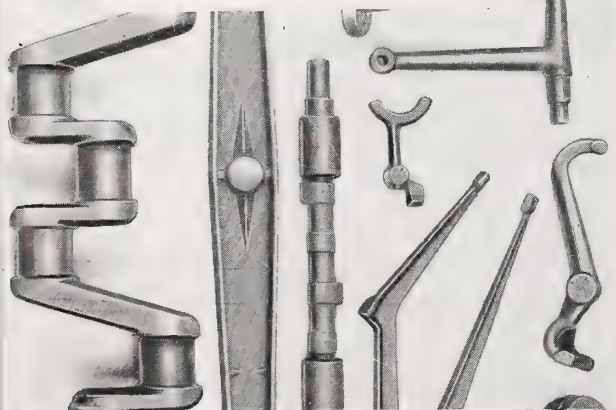
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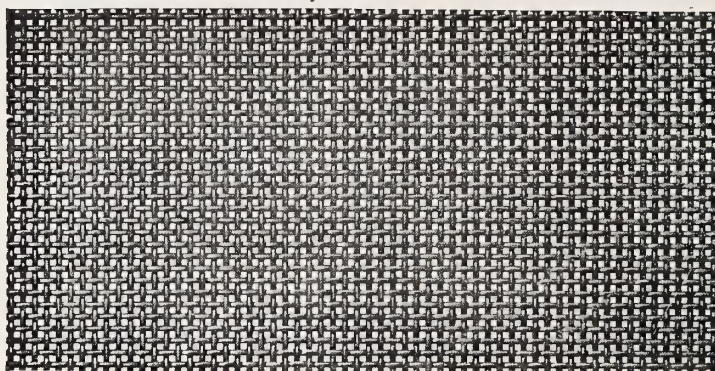
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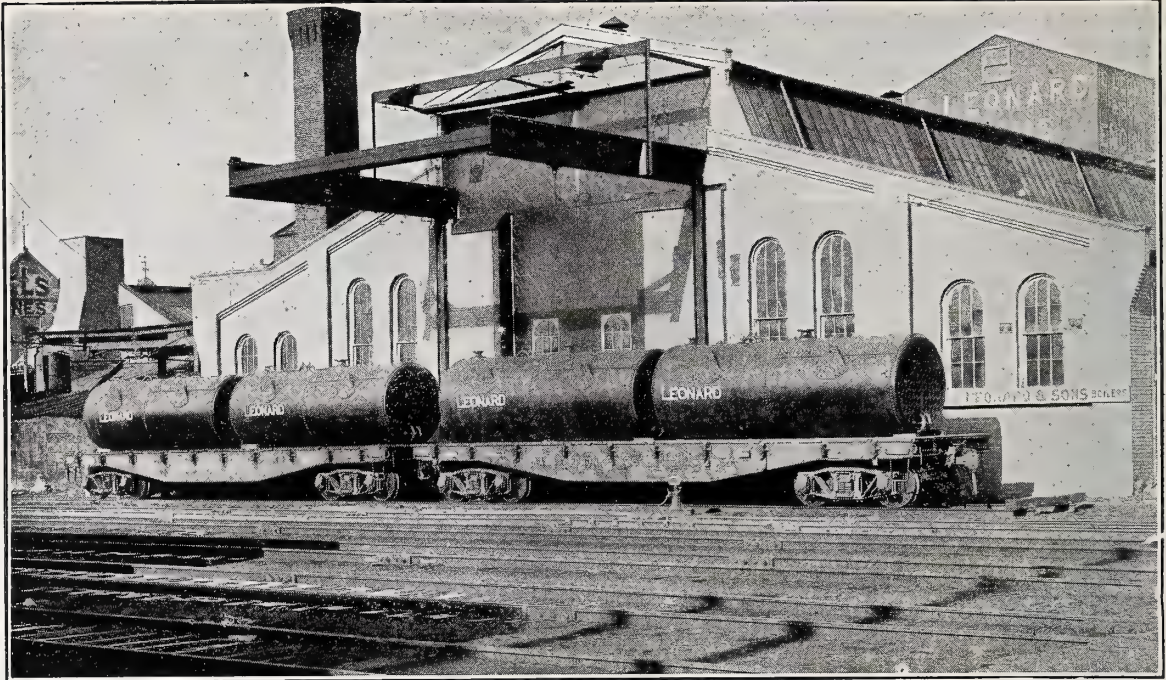
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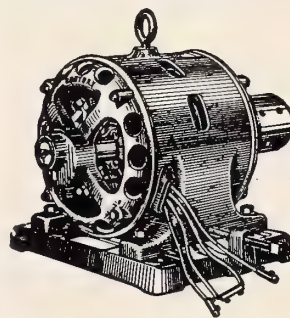
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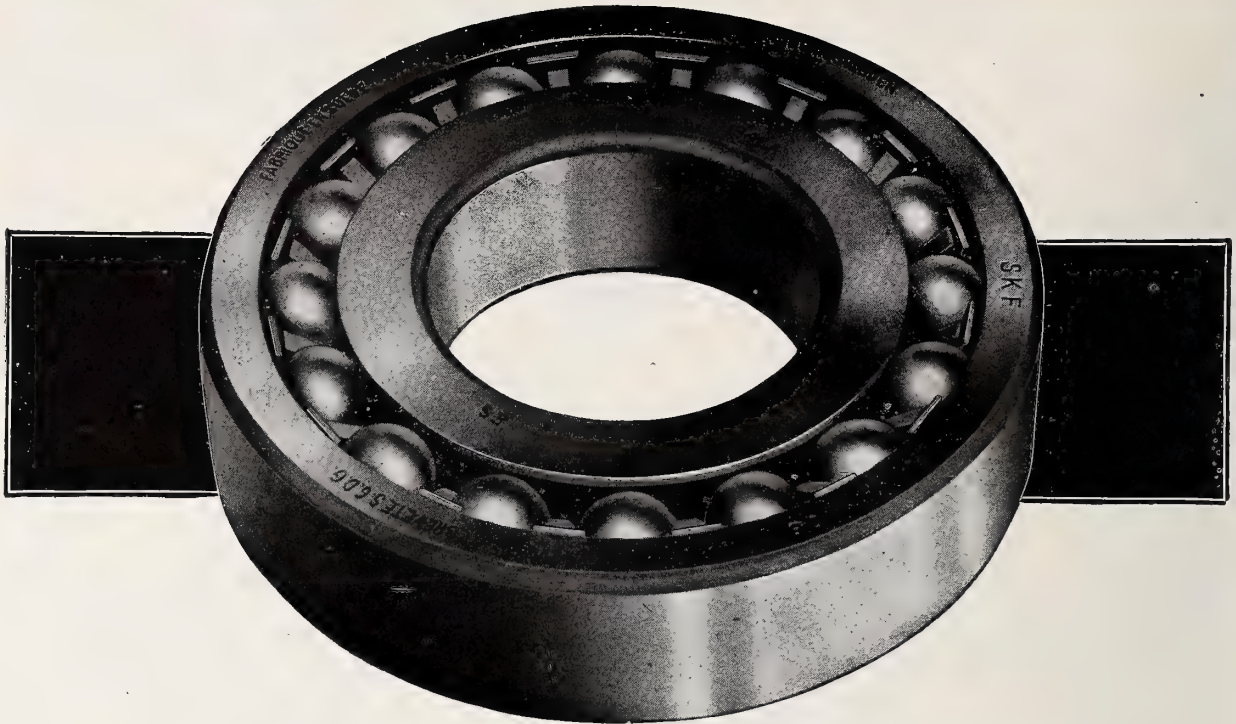
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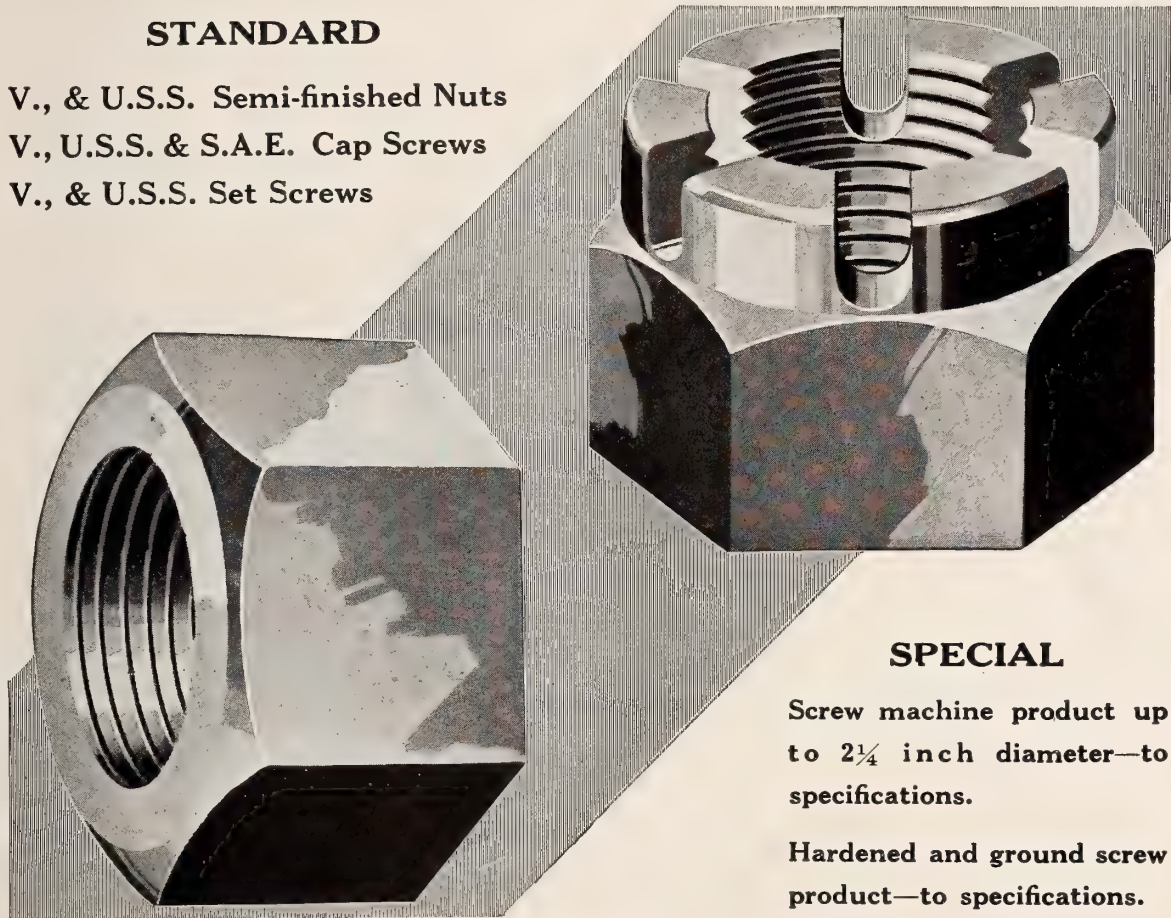
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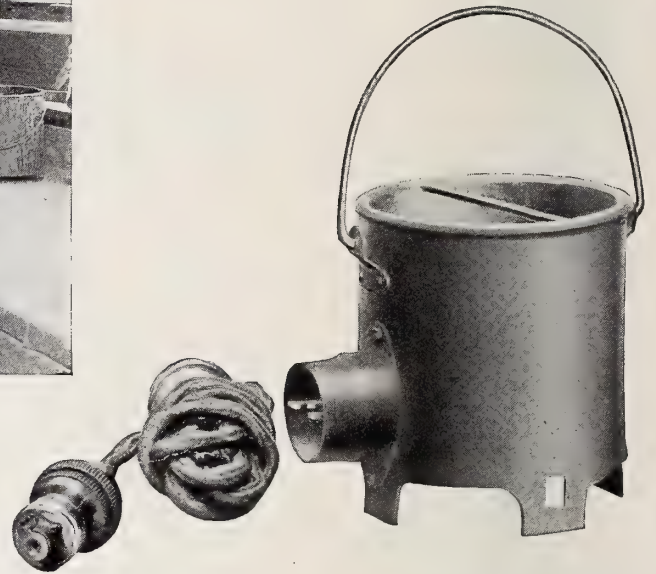
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Issued monthly as the official publication of the Canadian Manufacturers Association
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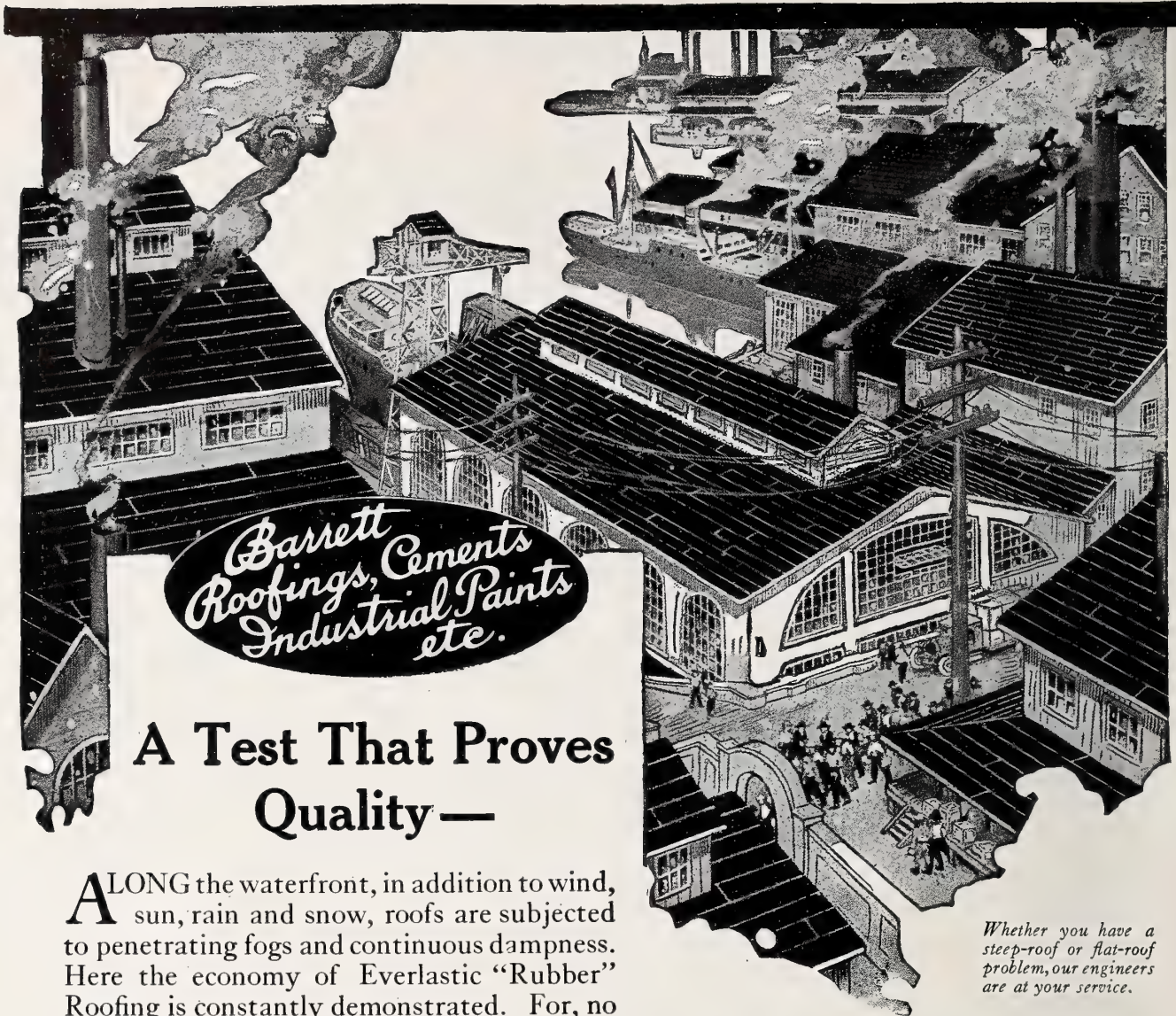
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The Canadian Manufacturers Association

INCORPORATED

Vol. XXIII.

TORONTO, SEPTEMBER 1921

No. 5

Editorial Comment

Made-in-Canada at Fall Fairs.

THERE has been a most gratifying response to the request that special emphasis should be laid on the Made-in-Canada feature at this year's series of exhibitions and fall fairs. Both officials and exhibitors have recognized the importance of stressing the home buying doctrine and in every conspicuous position cards have been placed directing the attention of visitors to the fact that the purchase of goods made or produced in Canada helps to keep Canadian workmen employed.

The campaign, it should be noted, is by no means limited to the advocacy of buying goods manufactured in Canada. While important enough in itself because of the large numbers of the population who are dependent for a livelihood on manufacturing industry, this portion of the country's production lays no claim to be exclusively considered. The products of field and forest, of the mines and fisheries, are also entitled to inclusion and thus the expression "Produced in Canada" is the real slogan of the campaign. The people are being urged to buy the products of Canadian farms quite as much as of Canadian factories.

So extensive has been the publicity at the exhibitions and fairs this year that beneficial results must accrue. People cannot see again and again the words, "Keep your Fellow Canadians employed by buying Canadian products and manufactured articles," without at least giving some thought to the subject. Once convinced of the truth of the argument, they will begin to put it to practical test and that is just what the advocates of home buying really desire.

Fire Prevention Day.

ON October 9 there will again be observed Fire Prevention Day, both in Canada and the United States. The date is a fitting one, for just 50 years ago there occurred the great Chicago fire, which destroyed practically the entire city, with a loss of 200 lives. This spectacular catastrophe will serve as an illustration and object lesson

for the present generation and will drive home the arguments of the advocates of fire prevention, which will no doubt figure prominently in the observance of the day.

Canadian manufacturers must realize the importance of securing widespread interest in the subject of Fire Prevention and it is to be hoped that they will lend hearty support to whatever local plans may be arranged for observing Fire Prevention Day. The aim of those who set aside this day for special observance is to bring to the people of North America a realization of two fundamental facts; first, that the fire loss is everybody's loss and everybody's responsibility and second, that the great majority of fires are preventable through the exercise of ordinary carefulness. It is because these fundamentals are not commonly realized that fire losses are so enormous and it will be only when fire prevention education brings a general realization of them that losses of life and property can be measurably reduced.

For those who may be at a loss for suitable ideas with which to observe the day, it may be stated that the National Fire Protection Association, 87 Milk Street, Boston, has issued a "Fire Prevention Day Handbook", which contains a great many useful suggestions along the lines of publicity of one sort or another. Copies of this handbook may be had for 15 cents each.

Articles On Foreign Trade.

THROUGH arrangements with the Canadian National Export Club, INDUSTRIAL CANADA is in a position to offer to its readers a series of articles dealing in a comprehensive way with the markets afforded by various countries for Canadian products. This month we publish the first portion of an article on the British West Indies, which has been prepared by Mr. W. P. Hughes, former secretary of the Quebec Division of the Association. Mr Hughes has gone into the subject very thoroughly and has presented information which cannot help but be of use to any manufacturer who proposes to enter the West Indian market.

In this same issue we also publish an informative article on the republics of Colombia and Venezuela in South America, with special reference to trade openings

there. This article is the work of Mr. E. C. Austin, a gentleman who has spent quite a number of years in South America and is now a resident of Colombia. His thorough acquaintance with the Spanish-American countries qualifies him to write with a good deal of authority and we commend his article to the attention of such of our readers as are interested in export trade.

It is our intention to devote more space to the subject of export trade in future numbers than has been the case in the past. Thanks to the efforts of the Commercial Intelligence Department and the Canadian National Export Club, it will be possible to maintain a regular supply of useful information on export topics from now on. If we are not mistaken, Canada is at the threshold of big developments in export lines and we feel that anything we can publish on the subject will be of service.

Stratford Manufacturers' Good Example.

A good example to their brother manufacturers throughout Canada has been set by a group of furniture manufacturers in Stratford, Ont. On two occasions now, these men have joined together and participated in trips to distant parts of the country. Two years ago they spent several weeks visiting the West. This summer they went East and toured the Maritime Provinces.

These trips were not intended to effect direct sales of goods. The manufacturers did not play the parts of commercial travellers. Rather did they go as men who studied markets, who wished to become personally acquainted with the trade to whom they catered and to hear about the problems and difficulties which that trade was encountering.

Two lessons may be learned from the experience of these Stratford manufacturers. One is the desirability of getting together. Doubtless the members of the party were competitors in business, yet they seem to have got along very well in company with one another. Their association on these trips will lead to more friendly relations at home and to the removal of obstacles to co-operation and mutual helpfulness.

Another lesson is the advantage of personal contact with customers and the acquiring of a knowledge of one's own country which only travel can impart. A group travelling together and interested in the same things can learn far more than if its members journeyed as individuals. The Stratford men are enthusiastic over the results of their trips and they are urging other manufacturers to follow suit, leave their offices and become better acquainted with their own country and its markets.

A Plea For Canadian Ports.

IN his address at the Canadian National Exhibition in Toronto, Mr. W. S. Fisher, President of the Association, reiterated the plea which he has made on several occasions for the greater use of Canadian ports and Canadian shipping in the transportation of goods to and from Canada. His remarks on this subject received endorsement from Mr. Ben H. Morgan, also a speaker on the same occasion, who gently chided Canadians for allowing so

much of their business to pass through the hands of outside interests.

Mr. Fisher made a telling point when he likened Canada to a human being. Ontario and Quebec might, he admitted, be the trunk of the body, containing the vital parts, but let anything happen to injure the extremities and the whole organism would feel the baneful effects. The ports of St. John and Halifax were being equipped at great expense to make them efficient channels through which trade might flow and it was in the interests of Canada as a whole that greater use should be made of them. The business men of Central Canada had a large say as to how their goods should be handled and it was their duty as loyal Canadians to see that Canadian shipping and Canadian ports were used as frequently as possible.

This appeal is quite in line with the ideas of the Made-in-Canada campaign and is virtually a part of it. If it is desirable that Canadians should buy goods produced in Canada in order to give employment to Canadian workmen, it is equally desirable that these goods should be transported over Canadian lines and that such goods as are imported or exported should be handled by the employees of Canadian transportation companies, thus retaining the carrying charges in this country.

Improving the Trade Commissioner Service.

WHATEVER may be the individual opinion of manufacturers as to the efficacy of Canada's trade commissioner service, it stands to reason that the Dominion cannot have representatives here and there throughout the world, with offices and staffs, without exerting some influence of a beneficial nature on the trade of the country. Just as it is sometimes difficult to trace direct results from advertising, so it may be a little hard at times to demonstrate the real dollars and cents value of the trade commissioners. Yet business men know that advertising pays and similarly it may be claimed with good reason that the trade commissioners are of value to Canada.

There is now a prospect that the service will increase its usefulness. The last session of Parliament enacted legislation which will require that the invoices of goods imported into Canada from foreign countries shall be vided by the trade commissioners resident in those countries or, in the event of there being no trade commissioners there, by the British consuls. A small fee will be charged for the purpose. From the fees thus collected a substantial revenue may be expected and this will go towards the maintenance and extension of the service.

It is rather surprising that Canada did not hit on this expedient for supporting the trade commissioner service long ago. Other countries have adopted it. The United States consuls in Canada have regularly collected fees on goods being exported to the United States. In fact, during the fiscal year ended June 30, 1920, these fees were nearly double in amount, the sum of money required to support the consular offices in the Dominion. It will be readily apparent that a considerable revenue will accrue

from this source, which should enable the Department of Trade and Commerce to put the trade commissioner service on a much better footing.

Labor's New Political Platform.

WHEN the new Federal Labor Party, organized last month in Winnipeg, approached the task of putting together the inevitable party platform, it completed the job with an unusually limited use of words. In this respect the labor platform stands in somewhat marked contrast to the farmer's platform. There are twelve planks in the new party's declaration of objectives, and they read as follows:—

"We have in view a complete change in our present economical and social system. In this we recognize our solidarity with the workers the world over. As a means to this end and in order to meet the present pressing needs we recommend the following platform:

"1.—Unemployment. (a) State insurance against unemployment chargeable to industry. (b) Regulation of Immigration.

"2.—Public ownership and democratic control of public utilities.

"3.—Electoral reform. (a) Proportional representation; (b) Names instead of election deposit; (c) Extension of voting facilities.

"4.—Old age pensions and health and disability insurance.

"5.—Abolition of non-elective legislative bodies.

"6.—International disarmament.

"7.—Direct legislation; (a) The initiative; (b) The referendum; (c) The recall.

"8.—Enactment of recommendations of Washington Labor Conference, especially the 8-hour day.

"9.—Repeal of amendments to immigration act providing for deportation of British subjects.

"10.—Removal of taxation on the necessities of life, taxation of land values, and abolition of fiscal legislation that leads to class privilege.

"11.—Nationalization of the banking system.

"12.—Capital levy for the reduction of war debt."

Labor vs. Farmers on the Tariff.

GIVING his impressions of the recent Trades and Labor Congress in Winnipeg, in an article in the *Manitoba Free Press*, W. R. Wood, Secretary of the United Farmers of Manitoba, expressed surprise and displeasure at organized labor's stand on the tariff.

"One was considerably surprised and by no means pleased to find that a position almost diametrically opposed to that of British labor was taken on the tariff," he comments. "A recommendation from the executive of the Trades and Labor Congress, quoted and passed in a report may be quoted with the remark that it is a long way off from the position of the organized farmers and would appear to be very much in line with the ideals of the Canadian Manufacturers' Association, the Canadian

Reconstruction Association, Sir John Willison, the Hon. Arthur Meighen, et al. This is what it says,—

"During the past year there has been carried on a very active campaign by certain interests for the adoption of a free trade policy in Canada. To the numbers of workers engaged by Canadian branches of United States industries and other industries claiming tariff protection as necessary for their existence, this question is a vital one. Your executive are of the opinion that tariff decisions should cease to be made a matter of political expediency and the decision for their maintenance or abolition, should be reached only after exhaustive inquiry and with a view to enabling the worker, in such industries, to be paid proper wage standards without destroying the industry by unfair competition from industries outside of Canada. We recommend the formation of a tariff board on which organized labor should have proper representation, created with full powers to deal with this subject in a similar manner to the powers exercised by the railway commission on railway matters.' "

The Japanese in British Columbia.

A SOMEWHAT sensational series of articles on "The Rising Tide of Asiatics in British Columbia" has been appearing during the summer in the columns of the *Vancouver World*. They are the work of J. S. Cowper, a well-known Canadian journalist, and reveal a startling increase in the activities of both Japs and Chinese in the coast province, particularly in the fields of agriculture, fishing and lumbering.

In one of the latest articles, Mr. Cowper tells, on the authority of an official of the Forestry Department at Victoria, of the encroachment of the Japanese in the logging industry. Government records show that 600 Japanese and 275 Chinese loggers are engaged in logging camps on crown lands, while many hundreds more are employed on private limits and in small shingle bolt camps, which are now dominated by the Japanese.

Prior to the war not a single Jap was employed in the British Columbia forests and logging was kept as a white man's industry. Whenever a Japanese outfit started up in the woods, the Government served notice on them under authority of an order-in-council preventing Orientals from working on crown lands and leases, and they withdrew without causing any trouble. The war, however, changed conditions. Lumber, especially airplane spruce, was urgently needed and any objection to allowing Japanese to enter the forests was overlooked.

With the conclusion of the war, an effort was made by the provincial government to remove the Japanese, but it was only partially successful. The Japs took legal action to prove that the province lacked power to exclude them from crown lands and to-day a legal battle is being staged to test the validity of new provincial legislation passed at the last session of the provincial legislature.

That the Japanese intend to leave no stone unturned to retain their present hold on the logging industry, is attested by the fact that their Association in British

Columbia has approached the Federal Government seeking disallowance of the provincial act. Whether the Ottawa authorities might have acceded or not, the fact remains that, in order to avoid such action and test the validity of the act, the Attorney-General of British Columbia has had to give an undertaking that the measure would not be enforced until its constitutionality has been decided. The position of the Japanese is based on the claim that the Dominion Government, by the provisions of the British North America Act, is vested with exclusive jurisdiction in matters concerning aliens who have become naturalized citizens of Canada.

How Trade Figures Compare.

WHILE the full effect of trade depression will not show itself in the returns of Canada's import and export trade until the end of the present fiscal year, it is interesting to observe from the statistics covering the last fiscal year, which ended March 31, 1921, that, with the single exception of 1918 when exports of war materials were at their peak, the figures for 1921 constitute a record. The total value of goods imported for consumption and of Canadian goods exported amounted to \$2,429,322,583, which was just \$74,237,783 less than in 1918. Necessarily some allowance should be made on account of values which would presumably range somewhat higher in 1921 than in 1918.

When consideration is given to imports and exports separately, we are confronted with the fact that while there was an increase in imports between 1918 and 1921 of \$276,626,304, there was a decrease in exports of \$350,864,087. In other words, while exports exceeded imports in 1918, imports exceeded exports in 1921. Prior to the war it was rarely the case that exports were greater than imports. During the war and for a year or two thereafter, exports were considerably larger. In this connection, however, it is pointed out by Mr. F. C. T. O'Hara, Deputy Minister of Trade and Commerce, that the decrease in the exportation of cartridges and explosives alone far more than accounted for the decrease in exports between 1918 and 1921 so that it may be claimed that in ordinary articles of commerce, Canada has held her own very well indeed since the conclusion of the war.

So far as values are concerned, the figures for 1922 are bound to show a considerable contraction, though, when quantities are considered, the change will not likely be so pronounced.

No Hostility in Made-in-Canada Policy.

THAT there is no antipathy to the old country or to the United States implied in the campaign to secure the greater use of goods of Canadian manufacture is being stressed by the *Winnipeg and Western Grocer*. This paper contends that it is all nonsense to say that this course is prompted by a silly desire to exclude goods imported from these countries.

"Any such idea is the emanation of a disordered brain. The policy of stimulating an increased interest and sale in Canadian-made goods is based on sound economic principles. Not only so, but it is an absolute necessity

if we are to maintain our position in the great commercial and industrial race upon which all nations of the earth are now engaged.

"As we have repeatedly urged, there are large quantities of goods which, owing to our geographical position, we shall have to buy from our neighbors to the South; large quantities of goods which we shall never be able to either produce or manufacture. Such goods we shall, of course, purchase in those markets which are controlled by British or American firms. These will ever remain our natural source of supply so far as goods are concerned other than those of Canadian origin."

The *Winnipeg and Western Grocer* analyzes the Made-in-Canada argument quite appositely when it proceeds to explain that "by purchasing Canadian goods we not only support home industries, but we also guard against the growing evil of unemployment. In many lines in daily use as much as fifty per cent. of the net cost goes in wages. Our import trade in goods similar to those produced in Canada is growing in the most alarming manner. And let it be clearly understood that this matter gives cause for serious alarm. We are and have been buying in foreign markets large quantities of goods which Canadian manufacturers and producers are able and willing to supply. Such conduct on our part is not only stunting the growth and stultifying the development of Canadian enterprise, but it is calculated to maintain prices at a higher level than need be.

"The subject of unemployment at the present time is a serious one. It gives cause for anxious thought as to what each individual in Canada might do to stem this unfortunate condition if they bought, as far as possible, goods of Canadian origin. Instead of paying into foreign channels the prices of the wages involved, we would be paying this into Canadian labor channels. It would be safe to say that at least several hundred millions of dollars are spent annually by Canada on the importation of goods that might be just as well, and perhaps better, bought in this country. This colossal sum represents an immense amount that would be paid in wages to Canadian people. Such an amount of money circulated in Canadian business channels would provide employment and to spare for all those who are now eager to secure remunerative work. It would provide tens of thousands with the opportunity of earning a dignified livelihood; it would be a direct encouragement to manufacturing and production throughout the length and breadth of the land, while it would supply us all with the undisguised satisfaction of knowing that we were all playing a part in the great Canadian scheme of up-building and development."

The British House of Commons has recently passed an Act known as the "Safe Guarding of Industries Act." It gives the Government power to apply protective duties on goods imported from foreign countries where the currency is depreciated in relation to sterling or when the importation of commodities will interfere with British production or tend to lower wages. This is a definite return to the policy of protection on the part of Great Britain.

The British West Indies as a Market for Canadian Manufactured Products

By W. P. HUGHES

PART I.

THE British possessions in the West Indies are to be divided into two distinct groups:—(a) The EASTERN, which includes Bermuda, the Virgin Islands, St. Kitts-Nevis, Montserrat, Dominica, St. Lucia, St. Vincent, Barbados, Grenada, Trinidad-Tobago, and the mainland colony of British Guiana. (b) The WESTERN, composed of the Bahamas, Jamaica, the Central American country, known as British Honduras.

A glance at any of the maps of the Caribbean Sea will show this division to be geographical, and it is important that Canadian exporters fix this distinction in their minds at the very outset, as it is the basis upon which trade routes, and consequently trade facilities are being developed.

Size of Market

The approximate figures on area and population are as follows:—

	Area Sq. Miles	Population
Eastern Group		
Bermuda	19	21,840
Virgin Islands	58	5,500
St. Kitts-Nevis	150	43,300
Antigua	108	31,782
Montserrat	32	12,196
Dominica	304	39,800
St. Lucia	234	53,788
St. Vincent	150	50,669
Barbados	166	200,000
Grenada	133	73,881
Trinidad-Tobago	1,974	400,608
British Guiana	90,277	311,000
	93,605	1,244,364
Western Group		
Bahamas	4,466	60,950
Jamaica	4,450	891,010
British Honduras	7,562	43,000
	16,478	994,970

The population may be roughly divided as follows:—

	White	Black	East Indian
Eastern Group			
Bermuda	5,000	15,000	
Virgin Islands	250	5,200	
St. Kitts-Nevis	1,000	41,300	
Antigua	700	27,000	
Montserrat	850	14,000	
Dominica	800	32,000	
St. Lucia	600	46,200	
St. Vincent	500	40,000	
Barbados	15,000	120,000	
Grenada	2,500	63,000	
Trinidad-Tobago	25,000	150,000	125,200
British Guiana	14,000	118,400	134,700
	66,200	672,300	259,800
Western Group			
Bahamas	3,500	54,000	18,000
Jamaica	18,000	610,000	18,000
British Honduras	1,000	41,000	
	22,500	735,000	18,000

While these figures in some respects are estimates rather than actual count by census taking, they serve to give a definite idea of the size of the market, and suggest some peculiarities with respect to the trade demands. The presence of such elements as Chinese, Aborigines, etc. has not been noted, as they are not germane to this discussion.

In the Eastern Group, there are 1,244,970 people, of whom the Whites number in the neighborhood of 66,200; 672,300 are Black; 259,900 are East Indian, and the largest portion of the remainder is Colored, i.e. the result of interbreeding between White and Black. The territory occupied is about 95,605 square miles.

In the Western group there are 994,970 people, of whom 22,500 are White; 735,000 are Black; 18,000 are East Indian, and the

Introduction

This survey is confined to a discussion of the market in the British West Indian possessions. It is intended to give Canadian exporters who are interested in the possibilities of shipping goods to this market, the sort of information that is necessary for an intelligent development of their trade. Such information will include reliable data as to the size, peculiarities and accessibility of the market, together with the latest developments in shipping and banking facilities provided for Canadian exporters by Canadian enterprise. It does not attempt to deal with the larger subject of trade between these two sections of the British Empire, but solely the possibilities for trade from the standpoint of the Canadian manufacturer or producer.

It hopes to suggest to Canadian exporters the nature of the competition they must meet, and the best methods to be employed for availing themselves of the opportunity open to them under the new preferential tariffs soon to be in effect. It is intended to be conservative and practical, while at the same time dealing with possibilities for trade expansion, the result of which only actual experiment can determine.

Criticisms, where made, are earnestly submitted as constructive and with the single idea of fostering the good name and hence the business of those for whom this report is written.

Grateful acknowledgment is made of the courtesy and assistance extended to the writer by the officials of the Department of Trade and Commerce at Ottawa, the Commercial Intelligence Department of the Canadian Manufacturers' Association, the Foreign Department of the Royal Bank of Canada, and the Canadian Bank of Commerce.

—The Author

majority of the remainder Colored. The territory is 16,478 square miles of Island and mainland.

Considered for a moment as constituting one group rather than two, this British West Indian market means the needs of some 2,238,331 people, of which number 88,700 are White; 1,407,300 are Black; 277,900 are East Indian, and the bulk of the remainder Colored.

Buying Capacity

Little or no manufacturing is done in any section, of this market, consequently these people are almost wholly dependent upon imports from other countries.

These figures for the year 1919 on the annual value of trade, showing these imports, are as follows:—

	Imports	Exports
Eastern Group		
Bermuda	\$ 3,463,710	\$ 599,875
St. Kitts-Nevis	1,500,000 (c)	1,825,000 (c)
Antigua	1,550,000 (c)	1,721,690
Virgin Islands	98,545	66,800
Montserrat	343,975	510,285
Dominica	1,016,800	1,283,915
St. Lucia	1,613,845	2,150,960
St. Vincent	925,640	719,460
Barbados	16,967,290	16,521,910
Grenada	2,190,550	3,186,845
British Guiana	16,376,900	19,625,000
Total Eastern Group	\$74,817,385	\$79,736,180
Western Group		
Bahamas	\$ 2,696,210	\$ 1,910,900
Jamaica	24,427,575	28,136,645
British Honduras	4,890,850	4,644,185
Total Western Group	\$32,514,635	\$34,681,515

These figures are for the fiscal year 1918.

These figures are estimates only, the final statistics of these colonies not being available.

Summarized the total imports to this market in 1919 were \$107,832,520.

Canadian exporters have then under consideration a market where 2,238,331 people buy annually goods valued at more than \$107,832,520.

Later, the writer will endeavor to show the sources of these imports, when dealing with the competition which Canadian exporters must meet, but in the meantime the point to be emphasized is the buying capacity of the market, for this is of prime importance as the essential condition necessary for business.

Much the same may be said of the East Indians, for while as a class they may be said to be more thrifty and enterprising than the negroes, they are also poor, and their purchases are likewise based primarily on this consideration of price.

On the other hand, quality may be argued with success by Canadian exporters when quoting on articles for the use of the various colonial and municipal governments, plantation owners, those engaged in marine enterprise or inland development, as well as the wealthier families and individuals. In spite of the commercial reaction of the past six months, in which the West Indian business men have suffered correspondingly with the rest of the world, such buyers are in a much better economic position than they were in pre-war days, and are disposed to purchase with quality in mind where their interests are concerned.

Some Illustrations.

One or two simple illustrations out of the writer's own experience as a salesman in this territory will perhaps make more clear these features. He had with him samples of brooms and paint, standard products of well-known Canadian manufacturers, having large sales here in Canada. Neither was of any material interest to West Indian buyers for the reason that they could buy inferior articles at lower prices, and experience had taught them that price is supreme. A two or three string broom, of such poor material that the Canadian housewife would refuse to have it in her kitchen, is the big seller. The demand for a better four or five string broom is, in comparison, only occasional, for even among the wealthier buyers the actual users are negro servants, and "why buy brooms that these servants will only misuse and destroy as quickly as they would the cheaper brooms" is the attitude taken by many.

With regard to paint, one of the merchants expressed the situation thus:—"The negro doesn't know or care anything about 'quality' in paint. Paint is paint to him, and color is color, so that anything that has the color and can be used to cover a surface satisfies. What he does inquire is, 'What is the price?' and if that is right, he buys." While this may be true, the absence of extremes in the climate, no doubt, has an effect on the length of time that paint will wear, and therefore has a bearing on this disregard for quality, as it has on the same lack of consideration in connection with many other commodities. There is also to be contrasted with this attitude of mind the attitude of buyers mentioned above, as giving weight to quality.



Mahogany Logs on Board Ship. Belise, British Honduras.

—Illustration by courtesy of H. J. Waddie, Hamilton.

Big buyers of marine paint for example, want to know something of the quality as well as the price, and the same is true of other buyers in this group. The writer found plantation owners, and merchants who supply them with their machinery and other necessities interested in quality and efficiency quite as much as in price. Concrete machinery, pumping outfits, and gasoline engines have been sold to this trade from a quality standpoint, with price a secondary consideration, though, as might be expected, where quality was similar, price became the predominant factor.

Where Prejudice Operates.

The attitude of the negroes towards our Canadian salmon is interesting, as showing how some prejudice will affect the possibility for immediate business. The American "Alaska Red" salmon has been on the market for years, and the negroes are accustomed to buying the cheaper grades of this "Red" salmon. Even with the difference in exchange, and a considerably lower initial cost price, it is only with a great deal of difficulty that merchants can be induced to order any quantity of our Canadian "pinks" or "chums". The buyers want red salmon, and in reply to arguments as to quality and price, they affirmed that the negroes considered only the color, and that if it were red they would buy, and if not, they would not buy. There is no doubt in the writer's mind that our Canadian "Chums" are much superior in flavor and general eating qualities to the cheaper grades of Alaska "red," yet the prejudice in favor of the "red" product is sufficiently strong to be a real barrier to trade in Canadian fish in the face of quality and price.

The hopeful thing about such a situation is that prejudice can be dispelled through advertising and education, and their very presence signifies a field capable of large development, as the people become more intelligent in their buying. At the same time, the fact should not be overlooked by Canadians interested in increasing their export trade, that, after all, these people import annually goods valued at more than \$105,000,000, and that these goods are, for the most part, either produced or capable of being produced in Canada.

Special Features

Climatic conditions in no small measure determine the kind of goods which the people in any market have need for, and consequently

buy. In this West Indian market the climate is distinctly tropical. The temperature, speaking generally, has a variation within twenty-five degrees, according to the season, ranging from 65 degrees to 90 degrees Fahrenheit. In some sections there is a slightly wider variation, but the average is well within these figures. This absence of extremes is the outstanding feature of the climate to be noted by Canadian exporters, as having a direct bearing on the nature or classes of commodities from which they may expect to find a present demand, or hope to create a demand in the future. It is obvious under these conditions that the people will have no use for such articles as heavy clothing, heavy blankets, heating systems, and, in short, all those supplies that people living in a climate such as Canada's require to meet extremes of temperature, and for which there is at least a seasonal demand. On the contrary, the trade will approximate what we know as our summer trade.

The style of architecture, the furnishings in buildings, the customs and habits of the people in both business and private life reflect this influence of climate, and directly affect trade and trading practices. The buildings are so constructed that any breeze will reach every part of them. Windows are large, and in most cases without glass; small rooms and air-tight partitions are avoided as much as possible. No heavy curtains or wall decorations are allowed to obstruct the passage of air; carpets and large rugs are not in demand as being hot and unhealthy. There is little call for heavy or upholstered furniture. Cooking is done almost universally in out-houses or in the open air. Cook-stoves or ranges as used in Canada have, practically speaking, no sale. Cheap, unornamental iron stoves are sometimes bought by the wealthier classes in the larger centres, and by plantation owners, but the common utensil is an iron pot called a coal pot or Dutch oven, that closely resembles an old-fashioned iron kettle with provision for a fire at the bottom. The people live a great deal out of doors, and wide, shaded verandahs are as much a part of the better class of home as the interior itself.

Business and Social Life.

It will be instructive to outline how this influence of climate affects the business day. The head of a firm is usually in his place of business and ready for work at eight o'clock in the morning. Between eleven and eleven-thirty he leaves for "Breakfast" returning

about one p. m. for the business of the afternoon. At four o'clock everything is shut up for the day, and business is at an end. The hours from four to seven are usually spent in social or recreational pursuits, and it is over the five o'clock cup of tea or some other form of liquid refreshment that the "traveller" or "representative" gets to know the business man in a social way. This opportunity for mixing socially with business people, at the club, or on the hotel verandah, or in the home, is an important factor in getting business, and its proper use should be well considered by salesmen. Late theatre parties or social functions, apart from an occasional dinner, and the more frequent dance, are not common, though dinner engagements and social evenings in the home supplement this opportunity for social intercourse.

Viewed from the angle of its effect on the demand for commodities, this influence of climate is seen in the continuous demand for the same articles throughout the full twelve months. The direct result of this is that people living in these countries have become accustomed to buying the same make or brand of goods, and thus it is that, once established, a certain make or brand is in a most favourable position to hold the market indefinitely, and that the introduction of a new line is only possible through the offer of some real inducement, which in practice means a lower price, or a program of advertising that creates a desire for the article in question, or both. It is very important that Canadian exporters realize these things for their success is dependent upon whether or not they can overcome this conservative feature of the market, but, on the other hand, it means that once they do establish their products they may reasonably hope to enjoy a constant and growing demand as time passes.

Health Conditions

Closely associated with the consideration of climate is the health condition of the people. Whatever it was in the past, it may truthfully be said to-day that there is no outstanding drawback in this respect. Improvement in methods of supplying water to the towns and cities, together with other governmental endeavors of an educational nature, have removed for the most part the causes of general unhealthiness. Such scourges as yellow fever and malaria have been altogether eliminated, or reduced to a minimum. This is important, not only in its bearing on the safety of travellers who visit the market, but also in connection with the increase in the number of white people who, it may be expected, will sooner or later reside in the territory, and lead in the development of its natural resources.

Racial Factors

Though numbering less than five per cent. of the total population, the Whites, or people of European extraction, constitute the ruling business class. Wholesale and retail merchandising, plantation operations, marine enterprise, as well as schemes for the development of natural resources, are almost universally under the control of, and carried on under the direction of white people. In some of the professions, as, for example, among the doctors and lawyers, and in some of the smaller islands, where the colored merchants are among the most successful, there is a variation from this rule, but, generally speaking, the white races predominate in authority and business activity. One great exception to this rule is the rice industry in British Guiana, where the East Indians have the initiative, and own and operate most of the fields.

It follows, then, that Canadian exporters will deal, as a rule, with white people, but it should not be forgotten that, with the ex-

ceptions of Trinidad and British Guiana, where the presence of a large element of East Indians reduces the percentage, the black and colored people number approximately ninety in every hundred, and that therefore the bulk trade of this West Indian market must be in articles of a kind, and at a price that attracts this class of buyer. In spite of the fact that there are well-to-do, educated, black and colored men holding responsible positions here and there throughout the territory, these exceptions do not detract from the truth of the statement that, as a class, they are poor and primitive in thought and mode of living. They are excitable by nature, happy-go-lucky as long as they can supply their immediate wants, given to child-like display, and are controlled by emotion rather than reason.

They have the reputation of working only as necessity compels, and of spending all that they make. This criticism, while substantially true, does not do them full justice, for statistics as to the product of their labor, and the record of saving-banks show that they are not so improvident as such a statement would lead one to suppose. It is certainly true, however, that they work for much smaller wages than do Canadian laborers, and that they cannot afford to buy expensive articles of trade. This is the explanation of the fact that the general trade in the West Indies is in goods of inferior quality, and that price is the ruling factor rather than quality. Habit or prejudice will keep an established brand on the market for a considerable time, notwithstanding a difference in price, but in the long run, price, not quality, controls the sales.

Accessibility of Market

Georgetown and Belize, the principal ports of British Guiana and British Honduras, at the extreme end of this market, are approximately the same distance from Montreal or Toronto as is Vancouver. It follows that from the point of distance, this West Indian market is as accessible to manufacturers in Eastern Canada as is the Canadian West. In addition, freight charges are less. Any manufacturer may verify this by obtaining the comparative rates on a particular commodity, but for purposes of illustration, the comparison on a number of staple commodities is as follows:—

	Winnipeg	Regina	Calgary	Edmonton	Vancouver	British Guiana	British Honduras
Flour—Carloads	72½	85½	93½	93½	1-14½	\$1-30 bag	60c-100 lbs. in bag
Min. 50,000 lbs ..						196 lbs.	
Less carloads	1-50	2-00½	2-54	2-54	3-14	-70 half bag	67c-100 lbs in bbls
						98 lbs.	
Canned Goods							
Carload Min.	1-23½	1-67½	2-16	2-16	2-68	\$1-00 per	42c. cu. ft.
24,000 lbs						100 lbs.	84c per 100 lbs.
Less carloads	1-93	2-61½	3-33	3-33	3-94½		
Boots and Shoes							
Carload min.	1-93	2-61½	3-33	3-33	3-08½	50c. cu. ft.	30c. cu. ft.
20,000 lbs							
Less carload	2-89	3-88	4-97	4-97	4-30½		
Drugs							
Carload min.	1-93	2-61½	3-33	3-33	2-92	50¾c. ft.	42c. cu. ft.
							84c. cu. ft.
Less carloads	2-89	3-88	4-97	4-97	3-83½		
Machinery crated							
Carloads Min.	1-09½	1-48½	1-96	1-96	2-44½	50c. cu. ft.	42c. cu. ft.
24,000							
Less Carloads	2-89	3-88	4-97	4-97	6-17	\$1-00 per 100 lbs.	84c per 100 pers.

Even with the additional cost of shipping goods from points in Ontario to Montreal for export, the comparison is still in favor of the West Indian market.

The longer rail haul to Halifax during the winter months can not be disregarded, but the comparison is intended only to suggest



Sorting Sponges, Sponge Market, Nassau, Bahama Islands

—Photo by courtesy of H. J. Waddie, Hamilton.

the relative accessibility of the market, and if it does that, it serves its purpose.

Transportation Facilities

The necessity of recognizing the division of this market into eastern and western groups is at once brought out, when Canadian manufacturers consider the shipping facilities open to them for developing their trade in this territory. While it is true that the distance between members of the western group is larger, in comparison with the mileage between islands in the eastern, yet the greater distance between the two groups, coupled with the fact that there is little opportunity for inter-trade, has brought about the development of separate steamship services from Canada.

In 1912 the Canadian Government effected a reciprocal tariff treaty with the principal members of the eastern group, and has since that time maintained a fortnightly service, passenger and freight, from Halifax and St. John to these points, by subsidizing the

ments from both the eastern and western groups, held in Ottawa last summer, provision has been made for increased passenger and freight services. In conformity with these provisions, the Canadian Government Marine has maintained their freight service to the eastern group, and inaugurated fortnightly sailings to Nassau, Kingston and Belize, the three principal points in the Western group.

The steamers on the western route besides carrying mail have accommodation for thirty first-class passengers, but such service to the eastern group is still restricted to that offered by the Royal Mail Steam Packet Co., out of Halifax. For the C.G.M.M., Montreal in the summer, and Halifax in the winter, are the ports used. The Royal Mail Steam Packet boats call at St. John, N.B. north-bound, proceed thence to Halifax, and leave for the South from that port the year round.

Regularity is a feature highly to be desired in such service, and the writer is glad to say that there has been a marked improvement in this respect during the past few months. The Government steamers on both the eastern and western routes now run on schedule, and may be counted on, barring accidents, to arrive and depart on time.

The facilities for handling freight on all these lines are excellent. Conditions are peculiar in that, with the exception of British Guiana and St. Lucia in the eastern group and Kingston, Jamaica, in the western group, shallow harbors necessitate anchoring anywhere from one-half to three miles from shore, and all freight is transferred to barges or sailing craft, called "lighters", and conveyed on these to shore. This entails extra handling under circumstances that are sometimes, owing to the state of the weather, calculated to mean rough usage. Every possible care is taken by the officers in charge to avoid accidents during these operations, but unless goods are well packed and properly protected, breakage and loss will sometimes result.

In addition to these direct steamship connections, there are numerous lines running out of American ports, whose boats call at some of the larger centres in this market, but, as far as shipping freight is concerned, there are many disadvantages, and no advantages for Canadians in using them.

Before leaving the subject of transportation facilities, it should be emphasized that there is no direct means of communication between the two groups. Such work can only be done by considering the groups as separate markets, and trips should be arranged accord-

Royal Mail Steam Packet Company. Since the creation of the Canadian Government Marine, the service has been augmented by sailings of Canadian Government boats.

Under the trade agreement resulting from the conference between the Dominion Government and representatives of the Govern-

ingly. It may be possible, by roundabout means, to get from points in one group to points in the other, but the time lost and the expense incurred will not warrant such an attempt. It will be found more economical, both as to time and money to make two trips from the Canadian port, rather than endeavor to canvass the whole territory in one.

Postal and Cable Service

The rate of postage from Canada to any point in this territory is the same as that between two points in Canada. It should be pointed out that the postal facilities coincide with the steamship service. This is most important for Canadian manufacturers to realize, as it is a factor which should be taken by them into consideration, not only in communicating with their travellers and buyers, but also in connection with making shipments, and forwarding of documents. It is true that for some points, like Bermuda, Barbados, Trinidad, British Guiana and Jamaica, it is possible to get quicker postal communication by sending letters via New York, yet, apart from these exceptions, the ship that carries the goods must also carry

There are many ports at which boats from United States ports do not call, and there is additional expense and often delay in shipping via these indirect routes. To ensure to the consignees the benefit of preferential tariffs, special documents are required to take care of customs regulations, and, in short, unless some special factor intervenes, our own Canadian services will prove more economical and satisfactory. Canadian exporters should also remember that if our Canadian services are to be improved and developed, they must be patronized, and that it will be good business in the long run for them to do this.

the documents, if they are to arrive within days or possibly weeks of the time the goods reach their destination.

Communication by cable, unfortunately, has been intermittent and most unsatisfactory during the past year, chiefly as an after-effect of war demands. A considerable betterment of the connections will be necessary before anything like satisfactory service is open. An indication of advance in this direction is given in the official report of the conference held in June last. The representatives of the several governments interested undertook to recommend that British-owned and British controlled cables shall be laid as soon as possible to connect Bermuda with Barbados, Trinidad, British Guiana, Windward Islands, Leeward Island and Jamaica. The Government of Canada undertook to institute inquiries as soon as practical, as to the possibility of arranging for laying such cables. At the present time an agreement is in force with the West Indian and Panama Telegraph Company which connects up with the Canadian companies for the transmission of messages to this territory from Canada.

The ordinary charge at the present time from Montreal to the leading centres of trade are as follows:—

Bridgetown, Barbados.....	36c. per word
Port of Spain Trinidad.....	36c. per word
Georgetown, Br. Guiana.....	36c. per word
Kingston, Jamaica.....	36c. per word
Naussay, Bahamas.....	40c. per word

Under present conditions it should be pointed out that it would be well for Canadian manufacturers not to place too much confidence in the possibility of sending and receiving messages with any degree of regularity.

Accident Prevention in Cape Breton

Excellent Progress being made by Dominion Coal Company since it adopted Safety First Programme.

TWO hundred and seventeen employees of the Dominion Coal Company have successfully passed examinations on "First Aid to the Injured" and will receive diplomas from the St. John Ambulance Association. During the past winter this Company organized and carried on among its employees, sixteen classes in "First Aid." The total enrollment in these classes would be approximately four hundred and fifty, but on account of the instability of circumstances, only the two hundred and seventeen referred to were able to attend all the lectures and therefore qualify for the examinations. The net result of the Company's initial effort is four hundred and fifty men instructed in "First Aid" measures, two hundred and seventeen of this number fully qualified certificate holders. This is a most commendable performance and worthy of being emulated by the other large industrial concerns of the Province. The value of trained First Aid men in any community is most obvious and particularly is this so in regard to mining and industrial communities.

First Aid equipment has been going into Glace Bay in practically carload lots. This is actually so in one instance, as recently the Company received a carload of the latest type of stretchers. These stretchers are kept in convenient places on the surface and underground, and are so situated that no matter where a man is injured, there is always one near at hand on which to take him to the "First Aid Station." Those underground are protected from dampness and dirt by galvanized containers. At every bank-head there is a "First Aid Station" which is in charge of one of the recent first aid graduates. These "Stations" are splendidly equipped with approved appliances, comfortable beds, necessary medicines, etc.; are always warm and absolutely clean and tidy. In those "Stations" which are not in close proximity to a regular hospital there are also standard hospital operating tables.

Accident prevention measures, as well as first aid instruction and equipment, are receiving the serious attention of the Coal Company management and officials. The "Safety First" campaign began with a general clean-up of scrap material and rubbish around the various collieries. In this general clean-up, something like eighty-seven carloads of material were gathered up and properly disposed of. As a consequence the different bank heads, yards, machine shops, etc., now present a tidy and well kept appearance, and the accident hazard in them is correspondingly lessened. In conjunction with the cleaning up process, attractive sign boards have been freely displayed calling attention to places where danger exists and soliciting the co-operation of everyone in the scheme of "Safety First."

The safety organization of this company functions similarly to that of the United States Steel Corporation and other large American industrial concerns which have had remarkable success in this sphere. There are in all twelve safety committees; eight are mining bodies from the different districts; two are from the two shipping piers; one represents the mechanical, electrical and railway departments, while the twelfth is the general executive committee.

All committees meet regularly once in every two weeks. The duties of the eleven district and department committees are as follows:

(1) To make a general inspection of the whole plant at least twice a month, and make a written report of the safety and sanitation conditions in and about the plant on forms furnished for that purpose.

(2) To keep a record of all safety problems that come up in their respective departments from day to day, and to submit these reports to the committee at the regular meetings for discussion.

(3) To investigate all accidents and consider in each case methods of preventing a repetition. The result of this investigation to be made in writing to the Safety Department.

(4) To caution and warn fellow workmen against unsafe practices, and to report to the foreman any cases where a fellow workman does not heed the warning given.

(5) To help enforce all Safety rules and regulations.

These committees finally dispose of all minor matters brought up, while matters of major consequence and involving the expenditures of more than a stated amount of money are referred by them, with recommendations, to the general executive committee. This general executive committee is made up of twenty-one of the company's officials, the assistant general manager being chairman, and the superintendent of industrial relations, secretary. At its fortnightly meeting all recommendations from the other committees are discussed and acted on, as well as all other matters pertaining to safety and first aid. Acting in conjunction with these committees, there is a most capable and experienced safety engineer and an equally capable safety inspector.

The company is a member of the National Safety Council of Chicago, the largest institution of its kind in the world, and from it receives sixty safety bulletins a week. These bulletins are displayed in attractive looking boards situated in most suitable places all over the company's properties. This bulletin service in itself should be a big factor in bringing home to employees the folly of carelessness and the value of the safety first idea. In addition to these purchased bulletins, some home made ones are displayed having a local application, as well as circulars covering various phases of the safety work, such as one calling attention to the necessity of having small cuts and scratches properly cared for in order to avoid blood-poisoning.

Although the safety organization has only been functioning for a few months, yet considerable good has been done. In four months \$260.00 has been expended in the purchase of safety and first aid equipment. Guards have been placed on dangerous machinery parts, safety railings and fencing built where necessary, safety electric switches installed on high voltage currents, dangerous practices on the Company's railroad stopped, and in many other ways the activity of the organization can be discerned.



Panoramic View of Puerto Cabello, Venezuela

Prospects for Canadian Trade in Colombia and Venezuela

By E. C. AUSTIN

Written Specially for Industrial Canada

CLOSER trade relations between Canada and the British West Indies have served to draw attention to the possibilities for extension of Canadian commerce in this territory are Colombia and Venezuela.

The countries having the largest areas and populations and the richest natural resources in this territory are Colombia and Venezuela.

These must not be confounded with the smaller Central American states north of Panama and extending towards Mexico.

They are the two northern states of South America with a total coast line on the Caribbean Sea of more than 2000 miles, and a combined total area of about 857,000 square miles.

They are adjacent to the larger British West Indies territories, Trinidad being at the extreme eastern boundary of Venezuela and within a day's sail of its principal ports, while Colombian Atlantic ports are reached in about a day and half's sail from Jamaica.

Large Populations

The whole population of the British West Indies is less than that of Venezuela above, while the combined populations of Colombia and Venezuela equal, if not exceed, the population of Canada.

The much closer proximity of these countries to Canada, as compared with Brazil, the Argentine or Chile can be seen by a glance at a map showing both Americas. It will be noted that, in a bee line, they are equidistant from eastern Canada with the North West provinces of Saskatchewan and Alberta.

The opening of the Panama Canal has been an event of immense significance for these countries, to such an extent that they may be considered to-day as newly-discovered territories. It will be remembered that the Canal was opened during the period of the war, and resulting restrictions on shipping and other untoward conditions have to some extent retarded the changes that will ultimately be brought about.

Formerly these countries, were, as it were, pocketed in the Caribbean Sea, far removed from the main routes of ocean traffic and scarcely at all touched by currents of immigration flowing from Europe to Brazil and the Argentine.

Isolation, lack of immigration and political disturbances, now happily a thing of the past,

Mr. Austin, the writer of this informing article, has had an experience of four or five years' residence and travel in Colombia and Venezuela. Added to this, he has enjoyed several years' residence in the West Coast republics of South America, which has given him a thorough grasp of the Latin American trade situation generally. During his sojourn in Colombia, he has introduced some Canadian products and more recently has increased the number and variety of his Canadian representations.

He has had opportunity to become well acquainted with the requirements of the different districts which vary widely as for example between the low, hot coast lands and river valley territories, and the extensive and comparatively cool highlands, and plateaus of the interior.

Mr. Austin has an office at Barranquilla, Colombia, S.A., and, until return to his territory towards the end of the year, can be addressed, care of Canadian Manufacturers' Association, Toronto, Ont. He will be pleased to correspond with parties desiring information or representation.

—The Editor.

have been the main factors holding back the development of natural resources in these wealthy states.

Now they find themselves in a position of considerable importance, half way on the new ocean route between Europe and Asia, which has special significance in relation to their rich but yet largely undeveloped deposits of petroleum; the "liquid gold" for which the world demand is increasing far beyond prospects of adequate visible supply. Already these countries are nearer to North America and Europe than any other South American states, and it is reasonable to anticipate that their further improved geographical position, coupled with early development of their resources under more stable political conditions, will mean the commencement of a new era of progress and advancement.

Immigration, particularly from Europe will begin to flow in. Primitive methods in industry and conditions of living will give place to modern improvements and appliances. New national industries will be established, and especially great impetus will

be given to agricultural development along up-to-date and scientific lines.

It is therefore not too much to predict that, in ten, fifteen or twenty years time, the general scale of living will have risen to an extent that the demand for general and high class commodities will exceed the present requirements four or five times or more in volume and value.

Development Backward

These countries are to-day more or less where Cuba was, before development, some eighteen or twenty years ago, but having far larger resources and natural wealth than even that rich island territory. They have available land for sugar cultivation of which the total Cuban area would form but a mere fraction. They have immense agricultural zones where pasture could be found for fifty million head of cattle or more. Their mineral wealth is enormous and includes gold, silver, emeralds, platinum, copper, iron, coal and salt, with petroleum and asphalt in great quantities. Their immense river systems with thousands of miles of navigable water can provide inexhaustible sources of hydraulic power. Their virgin forests contain valuable woods for furniture-manufacture, dye, tanning, medicinal and other purposes which only require transportation facilities for larger utilization in domestic and foreign markets. Already they have exported corn during the war period to North America. Frozen meat from a Venezuelan packing house helps to supply the British markets. Their cattle have been shipped in large numbers to Cuba, San Domingo and other adjacent Caribbean countries. Coffee and cocoa, the principal national products, are increasingly in demand from Europe and North America.

Cultivation of rice and cotton is being undertaken on a more extensive scale, and successful experiments with sisal prove that a fibre can be grown equal if not superior to the Mexican variety.

Transportation Needed

Developments most likely to take place in the near future and which will give immense stimulus to all classes of industry are those related to provision of long-required and adequate transportation facilities. That the need is very great may be understood when



Railway Station at Cartagena, Colombia



Plaza de los Coches, Cartagena, Colombia

it is stated that in Colombia with an area of 460,000 square miles only one highway of any account is to be found, with a length of about 200 miles. The total railroad mileage does not exceed 600 miles, and the need of railroad extension is especially evident in the journey from the coast to the capital city, Bogota, which requires about ten days on river steamers, making an average of three miles an hour on the up journey against the current.

An Important Port

Developments likely to take place in the near future at Barranquilla, the principal town on the Colombian Atlantic coast, promise to make it the most important place on the whole northern coast of South America. It has now a population of about 80,000, with important cotton-manufacturing and other industries, and through it passes the major part of the commerce of the country.

Obstructions of the channel at the mouth of the Magdalena River prevent ocean steamers reaching Barranquilla. Passengers and merchandise are disembarked at Puerto Colombia (Savanilla) about 20 miles distant and are conveyed by rail to Barranquilla where re-embarkation on river steamers for interior points is effected.

The opening of the mouth of the Magdalena River, which is shortly to be undertaken, will make Barranquilla a seaport and add considerably to its importance and volume of commerce.

The city, now with its sand-swept streets, impeding vehicular and other traffic, particularly in the wet season and its reed-thatched roofs, constituting a fire menace, will be paved and provided with proper sewerage and good water supply. Modern hotels and office buildings will be erected, and a general transformation take place that will bring it up to, if not beyond the level of the city of Para in Brazil at the mouth of the Amazon river.

Improving Navigation

While it is likely that some time may yet elapse before rail communication is established between the Atlantic coast and Bogota, the capital city, yet improvements in river navigation by dredging and timely removal of obstructions, and the construction of a highway for motor traffic from the capital to a point on the lower river, thus making unnecessary transference to the upper river and consequent changes and delays, will shorten this journey appreciably and make it a less formidable undertaking than it has hitherto been.

The recent establishment of a hydroplane service has made possible the conveyance of mail matter from the coast to the capital in approximately 36 hours, and new developments in aeronautics may at some future

time admit of the use of machines with capacity for passengers and freight.

As regards coastal navigation, the terms of the Panama Treaty with the United States provide for the free use of the Panama Canal by vessels of Colombian register.

Venezuela has already made good progress in the matter of highway construction, and has completed roads with a total length of about 1,800 miles. On this account interior points are more easily accessible than in Colombia and motor vehicles are increasingly in demand.

Railroad mileage is about the same as in Colombia. Eleven or twelve railroad systems are in operation with a total capital investment of \$40,000,000.

The economic situation in both countries is basically sound, though naturally there are temporary embarrassments due to abnormal conditions obtaining during this period of world-wide commercial depression.

Currency Circulations

The monetary unit in Colombia is the gold peso of the same fineness as the pound sterling. The total currency in circulation in 1919 was distributed as follows:

Paper money.....	\$10,000,000
Silver money.....	6,000,000
Gold money.....	31,000,000
Nickel money.....	3,000,000

The gold production of the Colombian mines is about \$6,000,000 a year, the exportation of which is prohibited. The premium on American gold has varied during the past twelve month period between 12% and 20%.

The national debt does not exceed \$20,000,000, (gold). During the war interest was paid promptly and national credit is firmly established.

In Venezuela the financial condition is said to be superior to that of any other country in Latin America with the exception of the Argentine.

The external foreign debt amounting, on December 31, 1919, to Bs. 89,385,506.61, (approximately \$18,000,000, gold) is being paid promptly, and the payment on principal of \$1,000,000 during a period of six months indicates that public finance is well looked after.

The monetary unit is the "bolivar", equivalent to the French franc, the London rate of exchange being generally 25.25.

Five foreign Banks in Venezuela have a paid-up capital of approximately \$60,000,000 (gold).

Politically these countries have during recent years been more stable than some other Latin American states.

Colombia has had no revolutionary disturbance during a period of twenty years,

and has excellent prospects of continued peaceful development. Venezuela has had a quiet time and has made remarkable progress since the Castro regime which terminated in 1910. The fact, however, must be faced that the present is a military government with the uncertainties attaching to such rule.

Fostering Immigration

Both countries are seeking to foster immigration, and various commissions from France, Switzerland and other European countries are studying the situation with a view to the establishment of colonies under proper supervision and with necessary assistance. A Venezuelan immigration agent is at present travelling through different countries of Europe and increasing numbers of immigrants arriving within recent months attest to the success of his endeavors.

The constant progress in sanitation, improvement and extension of educational facilities to all classes of the community, including manual and technical instruction, better transportation, and government based on true principles of democracy, will gradually improve living conditions and attract the best type of immigrant.

The commerce of these countries shows a steady increase as the following statistics reveal:—

COLOMBIA	
IMPORTS	EXPORTS
1911—\$18,108,863.36	\$22,375,899.56
1916—\$29,660,206.16	\$36,006,821.16
1919—\$48,487,763.77	\$79,029,255.92
VENEZUELA	
1910—\$11,266,000.00	\$16,816,850.00
1918—\$14,908,275.39	\$19,813,216.67
1919—\$27,020,000.00	\$33,196,000.00

In 1920 the value of importations through port of Barranquilla, Colombia, was \$62,449,000, with imports in the same period valued at \$34,860,942.00.

Imports into Colombia

The leading articles imported into Colombia in 1919 were:—

Foodstuffs (\$3,600,000); hides (\$8,500,000); machinery and tools (\$2,000,000); motor cars and vehicles (\$1,398,000) paper and stationery (\$1,500,000); industrial implements and railway equipment (\$4,000,000); glassware and china (\$800,000); oil, grease and paint (\$1,000,000); wines and liquors (\$800,000)

Principal exports were: Coffee (\$54,291,338); hides (\$4,600,000); cattle (\$3,500,000); platinum (\$3,506,000); bananas (\$2,215,000)

The principal articles imported into Venezuela are: Cotton textiles, wheat flour,

machinery, agricultural implements, kerosene, drugs and medicines.

The principal exports are: Coffee, cacao, balata, hides and skins, rubber, gold, copper, sugar, cattle and asphalt.

The prospects of Canadian trade with these countries are good, but the development of this trade depends in large measure on the establishment of direct steamer service from Canadian ports. There are two main lines of approach, one from Montreal, St. John or Halifax on the Atlantic route and the other from Vancouver or Victoria on the Pacific, via the Panama Canal. Already steamers of the Canadian Government Mercantile Marine come as far as Kingston, Jamaica, and have only a day and a half or two days' sailing to reach Colombian Atlantic ports, while in respect of Venezuela, steamers of the same line come to Trinidad, and are within a similarly short distance of the principal Venezuelan ports.

Direct Trading Desired

Colombian and Venezuelan importers have good reason to be afraid of quotations on Canadian merchandise, F.O.B. New York, with the heavy forwarding charges involved, and ocean freights payable in U.S. currency. They are keen on establishing commercial relationships with Canada and will show their appreciation of direct transportation by largely increased orders. This will also make possible C.I.F. quotations which are especially desired and facilitate the calculation of laid down costs.

The lines of goods which Canada can supply are mainly those of foodstuffs, particularly wheat, flour, biscuits and canned goods; agricultural implements; iron and steel products and general machinery, paper of all kinds; hardware and tools; cement, paints and varnishes, brushes and brooms; motor and other vehicles and accessories, drugs and chemicals.

It should be borne in mind that these are large self-sustaining countries in respect of food, and are not dependent to the same extent as Cuba on imported provisions.

There is a market for Canadian wheat at the coast in Colombia for flour milling, while native grown wheat supplies flour mills operating in the high plateaus of the interior. In Venezuela there is a market for Canadian flour, where little or no grain is imported for milling purposes.

Neither Colombians nor Venezuelans are consumers of codfish as is the case with the native peoples of the British West Indies. Canned salmon (a cheap pink variety), herrings, sardines, etc., are imported on a moderate scale.

There is large importation of rice, chiefly from Asia, and this with corn, beans, plantains and other fruits forms a staple article of diet.

The recent ratification of the Panama Treaty between the United States and Colombia under the terms of which the latter country is to receive from the former a payment of \$25,000,000 as compensation for the secession of Panama (formerly a province of Colombia) is an important event.

This will give Colombia considerable borrowing power, and money thus obtained will be used in public works.

It is estimated that more than \$500,000,000 will be expended in Colombia on development work in the next ten years, \$100,000,000 by the Colombian government itself. Nearly all of this will go into machinery and materials for public utilities, highways, railways, river and harbor improvements, and development of the petroleum and other mineral and agricultural resources.

Venezuela appears to be on the eve of a great interior development, especially in agriculture and cattle raising. Modern methods of agriculture now gradually being adopted will bring under cultivation immense stretches of fertile land in the Orinoco River district and add greatly to national wealth. Much interest has been aroused by means of national expositions of field products, timber, etc., and cattle shows.

An Advantageous Time

These and other favorable circumstances make it clear that the present is an exceptionally advantageous time for the introduction of Canadian products as also for the direct importation into Canada of articles produced in those countries which Canada needs.

The main factors favorable to Canadian trade are:

(1) The strong pro-British sentiment of the people; (2) the lower value, in relation to U.S. funds, of the Canadian dollar which brings it at present about on a par with Colombian and Venezuelan currencies; and (3) the banking facilities offered by the Royal Bank of Canada with branches in both countries.

Effect of Presidential Decree on French Trade

In its report to the Executive Council for September, the Tariff Committee referred to the French presidential decree which affects Canadian imports prejudicially.

"The Trade Convention between Canada and France gives Canada the benefit of the French minimum tariff rates on a limited number of items. To a very large extent, however, the French General tariff rates still apply against Canada.

"To safeguard French Industries whose existence was threatened by competition from countries with depreciated exchange, a French Presidential Decree dated March 28th, 1921, makes large increases in the general tariff rates of the French Tariff.

"The preamble to the Decree states that it is aimed against countries whose currency is depreciated in relation to the French franc. It is stipulated in the Decree that the increases are not to apply against United States products. But the French Government did not make the same stipulation in favor of this Dominion, although Canadian money is also at a premium in relation to francs.

"The present application of the foregoing Decree shuts Canadian factory products out of France, but admits like United States products. Canadian manufacturers who have spent considerable sums of money in advertising their wares in France, now see these investments made valueless, whilst their United States competitors are favored by France.

"Canadian manufacturers regard the Decree as a discrimination against them. The discrimination appears to be contrary to the spirit of the Decree, which states that it is made against countries whose currency is depreciated in relation to the French franc.

"It is important to Canadian production in the lines effected that the discrimination shall be removed promptly.

"Your Committee recommend that the Association urge the Dominion Government to ask the Government of France to at once exempt Canadian imports from the application of the Decree of March 8th, 1921, precisely as United States imports have been exempted, and also to proceed with the negotiation of a more favorable trade arrangement between Canada and France."



Two Interesting Views in Venezuela

On the left is shown a dairy building at Maracaz, where the best butter in the Country is made; on the right, section of the highway connecting Maracaz with the Port of Ocumare-de-la-Costa. Venezuela occupies third place in America for the excellence of its highways, being next to the United States and Canada.

The Truth about Russia as related by a Former Sympathizer with Soviet Ideas.

By JACOB H. RUBIN.

From an Address at the Swarthmore Chataqua.

ON my arrival in Moscow in the spring of 1920, I had to report to get a permit of residence. I applied to the Government and they assigned me a room and three meals a day and gave me a spy. Every foreigner gets a spy thrown in the bargain without cost. His room was next to mine. The way I found out that he was a spy was because when he talked to me he began to criticise the Soviet Government. No man would do this of his own volition, because he would be afraid of his life, as the penalty for this was to be shot at sunrise. The more he criticised the Soviet Government, the more I criticised the United States and after I got better acquainted with him, I asked him to do me a favor and I wrote a letter. He placed it with a courier. I did not expect my letter to be delivered but I wanted the Soviet Government to read it and I wrote everything nice about the Soviet Government. I thought perhaps this might help me later, when wishing to get permission to leave the country.

We were furnished with 1¼ lbs. of black bread a day. The bread consisted of everything. First I thought it was made out of linen and then tin and later I found pieces of nails and rope in it. The bread was repulsive and not fit to eat, but it was all we had. Then they served us with soup which was made out of potato peelings and it was the most delicious soup I ever had in Russia, because that is the only kind I ever got. On Sundays they gave us soup made of heads of herring.—I heard the soup before we got it. I gave a banquet one day for one Englishman and three Americans. I paid 32,000 rubles for the banquet and after we were finished eating we were all hungry.

Trading According to Rule

In regard to trading,—no one has the right to buy and trade things that is not according to the rules of the Soviet Government. Socialism means that all means of production must be confiscated into the hands of the Government for the benefit of the people. The Soviet Government not only confiscated the means of production but they confiscated all private property that was worth while. It was then I began to become dis-illusioned about socialism. The reason I became dis-illusioned after studying it for twenty five years was because I found out that, while socialism is a beautiful dream, it cannot be worked out in practice. With all due respect to Carl Marx, he made one little mistake, he failed to take human nature into consideration. The only thing worth living for is incentive. The Soviet Government have destroyed incentive. The Russian population comprised about 75% peasants and the peasants were divided into three classes. The nobleman peasants, who had more land than they could work themselves, called Class "A". Another class "B" who had just enough to work for themselves and not enough to be independent. Then Class "C" the landless peasant. Class "A" employed Class "B", Class "A" furnishing the land and Class "B" the labor from Class "C". From the production, Class "A" received 50% and Class "B" the other 50%. Under Kerensky's rule, the land was divided among the peasants and the peasants realizing that the land be-

This article contains portion of an address delivered at various points in the Maritime Provinces during the past summer in connection with the Swarthmore Chataqua courses. Mr. Rubin, the lecturer, was formerly a noted Milwaukee socialist. He is of Russian birth but came to the United States at the age of ten. He rose to a position of considerable prominence in socialist circles and was a well-known exponent of the doctrines of Carl Marx. He was a director of the Union Bank of Milwaukee, a bank for trades union depositors, and of the Provident Loan Society. When the Bolshevik revolution took place in Russia, he felt that at last the doctrines which he had been preaching were being put to test and he went in October, 1919 to Russia on a business mission, but with a strong predilection in favor of the Soviet Government.

In the first portion of his lecture, Mr. Rubin told of his experience in Odessa, where he was arrested by General Denikene and sentenced to death as a Bolshevik spy. His escape from death and his journey to Moscow were then narrated. The thread of his story is taken up at this point.

—The Editor

longed to them became energetic and worked hard. Then they produced the best crops. Under the Soviet Government they distributed the land among the peasants and established two classes, one dependent and the other independent. The Soviet Government took the land and each peasant got an allotment and no more, say 40 bushels of grain, 40 bushels of potatoes, one horse and one cow. The peasants realizing that that was all they got, were not so energetic and thus they lost the incentive. Even if a man produced 100 bushels, he would not get more than 40 and the result was a shortage of crop. From the uprisings that followed, 547 were killed in one village. There were many uprisings all over Russia.

I must tell you about the factories. When I was in Moscow, I made it a point to get some material for my book, and I visited the factories. I went to a shoe factory where they had a number of employees working, producing 7500 pairs of boots a month during the war. Now the same number of employees make 250 pairs of boots a month. I asked the manager, since he employed the same number, how it was that they were only producing 250 in comparison with 7500 before the war. He said the Soviet Government provided work for everyone. They began at 10.30 a. m. The Russian people are great tea drinkers and they had their tea and began an argument. They kept arguing and drinking tea until 5 o'clock, for the Russians might get along without food but they must have their argument, and at five o'clock an official came in and made a speech on communism and 6 o'clock saw the end of a perfect day.

One thing was in favor of the Soviet Government. During my stay in Moscow I was troubled with insomnia and I walked the streets for hours each night. Every hour of the night you would find groups of Russians on the streets filling their soul with music. Not the lively music which you have here,

but music that is sad, a language without words. I would be out for hours walking aimlessly around and I was never molested, or encountered a hold-up. They do not indulge in hold-ups in lonely places but confront you in the broad day light and ask if you have a watch or money and then present you with a mandate and say that they are requisitioned by the Government, and before you turn around, everything is taken from you. This is why there are no hold-ups at night.

Ideas of Free Speech

Perhaps you will be interested in knowing that among the Americans I met there, were Mr. Burkman and Mrs. Emma Goldman. One day I read in the paper that Burkman and Emma Goldman were to speak and I was very anxious to hear them. I came to the hall to hear the speech, but they did not speak. I asked Burkman why he did not and he said that the Extraordinary Commission told them they could speak and lose their heads or keep their heads and not speak. He preferred not to speak. Then I asked Emma Goldman what she thought of "Free Speech" and she said, "Forget it, if I can get back to America I will be a good little girl."

Among the other Americans I met, was a certain Mr. Vanderlip from California. I met him at Moscow. The Americans in Moscow were all placed in the Metropole Hotel. They were always waiting for something to turn up. When we heard that a certain gentleman from America was coming, we thought he would bring us food, and we were all sick and tired of potato peeling soup. In Moscow 5% were living in luxury and 95% were starving. This is the equality of communism in action, even in Moscow. We thought he would use his influence to get the Americans out of Russia. I appointed a delegation to interview Mr. Vanderlip. I acted as president of our colony. About an hour after they went to see him they returned and handed me a cigarette. I asked what this was and they replied that it was my share, that Mr. Vanderlip had given them three cigarettes. He was not interested in the Americans. He was a business man and he saw a chance to get contracts with Russia. Not only did all the papers write about Vanderlip's contracts in Europe and America, but even the members of the Federation of Labor waited on Mr. Vanderlip. He asked me to accept a position as his secretary, I remaining in Russia and he returning to America, and I told him I would only accept on the condition that he remain behind and I go home to America. Lenin and Trotsky made much of Vanderlip. Mr. Vanderlip did not live like the Russians. I did, I wore a blouse and spoke Russian.

Object is Propaganda

The United States Congress does not recognize the Soviet Government because their object is not commerce but propaganda. Lenin is more interested in propaganda than in commerce. For him Russia is but a nucleus to communism. Only when everybody has followed the example of Russia, of destruction and construction, will the real fruit of Internationalism be realized. The theory is that two objects cannot occupy the

same place at the same time. If you want a new building in place of an old one, it must first be destroyed and the land cleared and then a new structure can be erected. So, they say, before you can build up a perfect state of society, it is necessary to destroy (what they term) the capitalistic form of Government in every country of the world. That is one of the reasons the United States will not recognize Soviet Government of Russia. Its policy is one of destruction.

If commerce is what Russia wants, why will the Soviet Government not do business? I was in the revolution. At that time two needles were worth 120 rubles. Russia required needles. For four months German agents tried to get contracts for cheap needles, and could not—Why? Because Germany did not want communistic propaganda and Lenin would not trade without it. You will ask me perhaps, why did England establish trade relations with them? I want you to understand that Lloyd George is one of the greatest men in the world to-day. He recognized Russia for the purposes of commerce, but the agreement provided that the Soviet Government is not to make propaganda on English soil or in India.

As happy as I was to get to Russia, I was happier to get out—I lost thirty-six pounds in weight while there. I went to the Foreign Department to get a permit to leave. One of my friends told me that if I got a doctor's certificate, I could get a permit to leave, but it cost me 150,000 rubles to get the doctor's certificate and 25,000 rubles for the permit. All the Americans were envious of me. On the 19th of October, I left Moscow, never to return. I went to Petrograd and as bad as Moscow was, it was not a tenth as bad as Petrograd. It once had a population of 2,300,000 and now it has only 500,000. There is at least one member of every family who has died of typhus or some other disease and some families are wiped out entirely. The people over there do not care whether they are dead or alive. They know starvation and death. I was glad to leave Petrograd for ever. I crossed the border line and for the first time in some months I gazed upon the American flag. When I left America for Russia, I was not a patriot. I was an Internationalist; Communism has no country. I want to advise anyone who is not satisfied with United States and Canada, to have one month in Russia.

Causes of Bolshevism

In conclusion, let me tell you that a country can not be better than its people. I was a socialist for twenty-five years. I want to say to the capitalists that they need not think that the germs of bolshevism are only confined to Russia. Bolshevism is in United States and Canada. You know the cause; the cause is idleness and starvation. If a man has no incentive, notions will enter his mind that would not otherwise, but if a man has steady employment and sufficient wages, he will not be a bolshevik. Therefore it is the duty of the capitalists to see that labor is kept busy and well paid. They should understand the conditions of labor, that labor creates capital,—capital is simply accumulated labor,—and see that labor is well compensated, and that there is enough work to keep all busy. Labor should understand that while it is the creator of everything, labor cannot get along without capital. Labor could get along in the pre-historic time without capital, but today, due to the invention of machinery, capital is necessary. One cannot get along without the other. Capital assembles all the different parts of labor and makes production possible. Capital and labor must go hand in hand and help to construct a larger and greater United States and Canada.

Address of Welcome to recent Labor Congress

Reasons for Thankfulness are voiced, with some Observations on Unemployment and the Housing Problem.

By EDWARD PARNELL.

Mayor of City of Winnipeg.

IN rising to extend to you, as mayor of this the third largest city in the Dominion, a most hearty and cordial welcome, I desire to include in that welcome my sincere hope and wish that your convention will prove to be of such a beneficial and uplifting character to the workers of this Dominion and that the results of your deliberations will have such far-reaching effects that you and the citizens of this country generally will be able to look back to it as being the milestone or turning point at which employer and employees decided to bury for all time the difficulties and disputes of the past and that each from now on is determined to recognize that only upon the basis of equity and justice to both labor and capital and co-operation between all classes can we as a Dominion hope to work out the true destiny of this great and wonderful country that a kind Providence has endowed us with.

Visit to the West

I have just arrived home from a two short weeks' visit to the Pacific Coast, going out by Canadian Pacific and coming back by Canadian National which has given me a fairly good idea of the harvest we are now reaping, and, while in spots our farmers have been hard hit by hail and storm, on the whole I am convinced that there never was a time, looking the world over, when there has been greater cause on the part of our people as a whole for thankfulness, than at the present moment. True, I have met with pessimism in some quarters owing to the slowing down of industry, but I am satisfied that the financial results from the crops will go a long way towards relieving this condition and bring us back to a more normal situation. Let me here say that, in my opinion, while we have a serious and difficult task before us as a nation, this is no time for pessimism, but let us, on the contrary, face the task with an optimism born of confidence in our ability as a people and the unlimited resources of our country to make Canadians the most happy and contented people on the face of this whole earth.

As an employer of labor, myself, and representing as I do in that capacity the employers of this country, it is particularly pleasing, and in my opinion, most fitting that I should make this welcome as warm as possible because it indicates to me, as I believe it does to citizens generally, a spirit of goodwill and co-operation which is vitally necessary if we are to work out the many problems which are continually confronting us. As a member of the *Industrial Relations Committee of the Manufacturers' Association of this country*, I shall convey to them your spirit exhibited upon this occasion and urge them by every means possible, to reciprocate to the fullest possible extent.

Your agenda contains many most vital and important subjects for discussion, amongst them being the question of unemployment and the housing situation, which are very closely allied.

Unemployment Problem

With reference to unemployment;—as you are aware, Winnipeg like other cities, had to deal with that problem last winter and we believe the matter was handled, with the assistance of the Federal and Provincial Governments, in a fairly satisfactory manner, as far as relief goes; however, the committee having the problem in hand, decided to tabulate to the greatest possible extent, its

experiences and results, and, if the convention so desired, would be pleased to place them at your disposal.

With your forbearance I might, however, shortly emphasize four points:—

1. That there should be some relation between our educational system and the labor market so that the youth will be trained for such occupations as the prevailing conditions of the country demand.

2. That there should be much greater care exercised in the class of emigrant we allow to enter this country.

3. That we are suffering from a large influx of labor to the cities who, previous to the war, followed agriculture for a livelihood. Owing to the glamour and more attractive conditions of city life, as well as the fact that large numbers of demobilized men from the army preferred to remain in the cities rather than go back to farm work, this would seem to indicate the imperative necessity of a "Back to the Land" movement and that the Government of our country should at once give this their immediate attention with a view to the settlement of the now unproductive lands throughout the Dominion.

4. As this is a question of a national character, we would suggest that a Dominion-wide conference should be called at once because unemployment, so long as it exists in our midst, must receive our earnest and continued attention. Our efforts must be constructive and preventative. What is wanted is work, not doles or charity and permanent employment rather than casual labor.

Housing Problem.

With reference to the housing situation we believe that the federal, provincial and municipal governments jointly should at once endeavor to formulate a permanent housing scheme with a view to providing suitable homes to be owned by our working classes and which would have for its objective a higher ideal of citizenship and would stabilize the worker in the employment he might be engaged in rather than have a migratory population.

As an instance of what can be done along this line we in Winnipeg have a municipal housing scheme which this year will have loaned to our working classes the sum of about one million dollars at as low a rate of interest as possible, on the 20 year re-payment plan, constructing about 300 homes and giving employment to about 1,200 workers with a good security to the capital invested.

May I again be permitted to say that at no time in the history of our Dominion has there been a greater necessity for a good understanding between all classes or greater co-operation than the present. Our financial situation is one that should engage the attention of the best minds in our land. Our trade conditions should be most carefully scrutinized. Every effort should be made by our people to purchase Canadian made goods wherever possible so as to give to our own work people the benefit of the wages paid in their manufacture, but manufacturers should remember that they in turn must exert themselves to the utmost to provide those Canadian-made goods of the best quality possible and at the lowest possible cost, consistent with a fair wage to their employees and a reasonable margin of profit to themselves. Only in this way can we expect to help minimize the evils of unemployment.

A Review of Business Conditions in Canada, the United States and Other Countries

ILLUMINATING EXTRACTS FROM VARIOUS SOURCES

IT seems to be the feeling of writers on economics and business that conditions are now definitely on the mend, though the improvement is by no means uniform throughout all departments of trade. The coming winter, it is believed, will still be a trying one and it will not be until the spring of next year that the upward swing will make itself appreciably felt. In Canada, the harvest, which is really one of substantial proportions, is expected to be a strong factor towards general business betterment.

Volume of Canadian Foreign Trade Little Reduced

While there was a decrease in value of the total foreign trade of Canada during the four months ending July, 1921, as compared with the corresponding period of 1920, of some, \$350,000,000, the *Monthly Commercial Letter* of the Canadian Bank of Commerce for July makes it clear that there has been no great change in physical volume of trade. By means of a graph, based on the system employed by the Statistical Department of the Board of Trade of United Kingdom, it demonstrated that the volume of exports is greater than in the pre-war years, 1912 and 1913, despite the financial difficulties in which purchasing countries at present find themselves. On the other hand it is shown that while the volume of domestic exports is at present slightly greater than in the years immediately preceding the war, there has been a substantial decline in the volume of imports and this in spite of the increased population indicated by preliminary census returns.

Stabilization of Money Rates Believed to be Reached

Improvement in fundamental conditions is noted by *Commerce Monthly*, published by the National Bank of Commerce, New York, which in its September issue points to the increased availability of credit and the marked declines which have taken place in money rates in the last six months as among the surest evidences of betterment.

"From the beginning of June, 1920 to December of that year, the ruling rate on prime commercial paper in New York was 8 per cent.," it says. "Subsequently the rate gradually declined until money became relatively easy, present quotation representing a decline of about 25 per cent. from the high of the current year. Brokers' rates on prime 90-day acceptances have declined proportionately. Rates on call money have not only fallen greatly but have become relatively stable."

"Reviewing the entire situation," concludes the *Commerce Monthly*, "and giving due weight to the many factors affecting the market, business operations at this time should be based on probable continuance of rates at levels not far from those now prevailing. This should not be regarded as undesirable, since a stabilization of rates at these levels would be in line with the re-establishment of business activities on a sound and permanent basis."

Dealing with production and prices, the same authority says:—

"Conditions in July have all tended to confirm the belief that genuine business improvement is under way. Manufacturers in

The accompanying material is taken from a number of sources which may be regarded as authoritative. They include the monthly letters or bulletins of banks and the pages of well-known business and financial publications. When thus assembled and compared, it will be found that they supply a very fair idea of existing conditions throughout the world and furnish as accurate a key as possible to the future.

—The Editor.

many lines are sometimes wont to express a sense of discouragement, however, because forward orders are not as heavy as they were during the late period of abnormal business activity. It is doubtful whether this is justified. Good business policy requires caution on the part of buyers. Failure to exercise it contributed to the difficulties from which the country is beginning to recover. Smaller orders for early delivery if received in sufficient amount to maintain operation on a reasonable basis are at this time an indication of a healthy condition."

South American Republics Report Business Quiet

The *British and Latin American Trade Gazette* publishes a series of cabled reports to the Anglo-South American Bank, Limited, giving information about business conditions in the various South American republics at midsummer. Generally speaking these reports indicate a state of quietness, coinciding with conditions throughout the world.

Buenos Aires, in the Argentine Republic, reports prevailing conditions unsettled, with considerable liquidation going on at local stores. The Minister of Finance has issued a decree authorizing the Banco Hipotecario Nacional to make a further issue of mortgage cedulas for an amount of \$50,000,000 (paper). This will bring the total circulation of Cedulas up to \$720,000,000. Stocks of textiles held are slowly decreasing and prospects of summer trade are good. Tendency of prices in markets for local produce has again been in an upward direction, particular firmness being in evidence in the markets for maize, linseed and oats. The price of wheat, however, shows a small decline.

Rio de Janeiro, Brazil, reports that "business generally continues restricted, with most markets very quiet. There is, however, rather more confidence prevailing and there has been a small but steady enquiry reported from up-country for agricultural supplies. With regard to the commodity markets, price movements have been somewhat irregular."

Valparaiso, Chile, reports no change in general conditions. Prices in produce and cereal markets are firm, with the prevailing tendency in an upward direction, there being a good interest sustained on buying account, although freights to Europe are scarce. The stagnation in the woollen textile market continues. The Nitrate Association and the government are still engaged in studying the best method of dealing with the situation in the nitrate industry.

Bogota, Colombia, says,—"Dollars have remained fairly firm. Attention is being

directed towards improvements in the present banking law, meetings for the discussion of which have already taken place. A good portion of the coffee crop has been lost, owing to the rainy season having been more prolonged and heavier than for many years past."

Guayaquil, Ecuador, reports,—"The unusual quantity of imports and the fall in the value of the chief articles of export, combined with the exodus of capital abroad, have been it is considered, the principal factors in causing the present crisis. There is no change in the general situation, and it is felt that recovery will be slow."

Guatemala City, Guatemala, reports,—"The considerable fluctuations in exchange make business very difficult and there is little movement. It is alleged that speculation is frequently the chief cause of the extreme variations in exchange and some public protest has been made with a view to checking this abuse."

Managua, Nicaragua, says,—"Merchants are holding large stocks of goods, and sales are practically nil. Ready cash to meet engagements is very scarce. The low prices of coffee have made the position of some of the smaller cultivators very critical."

San Salvador, Salvador, says,—"Exchange continues fairly firm but there are few operations reported. Generally, business is very quiet and money very scarce."

Caracas, Venezuela, states,—"Although the position is far from encouraging, apparently the majority of the commercial houses realize the situation and have taken measures to cut down expenses. There is, however, much delay in payment of collections. There is a great scarcity of drafts. Imports are much restricted."

Smaller Stocks of Merchandise Must Induce Buying

In the opinion of *Comercial America* published by the Philadelphia Chamber of Commerce, better times are ahead. "Almost without exception" it says, "prominent American business men returning from recent foreign trips have been optimistic over the conditions which they found there. They have been optimistic in spite of the many trying financial and other problems which confront the countries through which they have travelled. The optimism of these men is the result of seeing people working hard, and the spectacle of results—the mined coal, the finished steel and waving crops of growing grain. Supplementing optimistic opinions concerning conditions abroad is the more hopeful feeling of financial and economic authorities in the United States that the fall will see a better volume of trade here."

"When the commercial and financial interdependence of the world's countries is realized, this harmony of opinion regarding the business outlook not only in the United States, but in Europe, South America, Africa and the Far East is gratifying. It shows, in a way, which direction the wind is blowing."

"Moreover, the news of the day is of continued liquidation reflected in smaller stocks of merchandise on hand everywhere. Of course such news can not be considered as having quite the cheering influence that reports indicating an actual general resumption

of buying would have. On the other hand, the knowledge that the supplies of consumable goods are steadily dwindling, not alone in a few markets, but all over the world, offers a sound basis for the expectation that a resumption of buying and a turn in the business tide is not far off."

Chief Direction of Germany's Renewed Trade

The British Export Gazette, dealing with "Germany's Export Revival", asks what are the chief directions of Germany's renewed export trade and answers the question by stating that they are to be found in the neutral countries of Europe.

"Before the war only some 20 per cent. of Germany's exports were absorbed by these markets; but last year the proportion was as much as 51 per cent., the trade with Holland having shown the greatest increase, viz., from 6.9 to 21.2 per cent. In other words, Holland is now purchasing a larger proportion of German exports than the whole of the neutral countries of Europe in 1913: Needless to state, the purchases of German goods by Allied countries have declined. Formerly Great Britain, Belgium and Italy took over 30 per cent of Germany's exports; last year the proportion dropped to little more than 15 per cent. The U.S.A., on the other hand, is taking the same percental share (7 per cent.) of German goods as before the war.

"But in view of the above figures, we may well ask where is the indication of Germany's rapid resumption of trade in Asia and South America and other parts of the world of which so much has been heard. Altogether the statistics from which we have quoted—and they are official—show that at the present time 82.8 per cent of Germany's entire exports are absorbed by Europe, while the U.S.A. takes 7.2 per cent. That leaves exactly 10 per cent for all the rest of the world—not a very formidable competition considering that some 36 per cent. of Great Britain's very much larger export trade, excluding Imperial markets, is with non-European countries! Such a fact, however, does not by any means suggest that British firms should ignore German efforts to regain an important share of non-European commerce. Precisely the reverse.

"For instance, a merchant recently returned from China, sums up the situation to us in regard to international commercial competition in that Republic in these words:—'American representatives are active everywhere and are gathering in business by the bagful; the Germans, though ostracised in many commercial circles, are occupying the best hotels and evidently flourishing, for while outwardly doing little, they are quietly pocketing orders wherever the opportunity occurs. As for the English, they are simply not there'. The picture may be a little exaggerated, but we give it as it was given to us."

The Situation in China Reviewed by Government Adviser

In an address before the Manchester Chamber of Commerce, B. Lenox-Simpson, adviser to the Chinese Government, who has taken part in official work in China for 25 years, gave some useful information on conditions in China. After referring to the great need of reorganization following formation of the Republic, he told how the banking system had recently grown in China so that there were now something like thirty-two banks which had become members of the Chinese Bankers' Association, and before he left China for this visit, the Governor of the Bank of China told him that the assets of these banks would amount to about one

hundred and thirty-five million sterling. For a great country of four hundred million people that total was small, but it was a beginning. It marked real progress, but obviously, in a country of such enormous size, time would be required to perfect the new instrument. Though this was so, it was a remarkable fact that in spite of the so-called disorder which had attended the institution of the Republic in China, the trade of the country had been in ten years more than doubled. It would be as they developed organization and increased the capacity of the people to govern themselves that their spending power would be developed, but all this would be quickened by what was taking place in the development of railways, roads and the use of rivers.

One of the greatest needs of the day was the consolidation of taxation. At present taxation was calculated in a very peculiar way, and the whole collection for the four hundred million people would not average more than 10/- per head. The explanation of this lay in the vicious and harmful system by which rates and taxes were collected by different authorities. He himself in taking a motor car a distance of eighty miles found that he had to be taxed on four different occasions. But the fact that the system of taxation would have to be revised brought them up against the question of increasing the Customs Duties. England, America and Japan had agreed to a new system of taxing, but owing to the fact that this agreement was inoperative until other countries dealing with China had agreed to accept the same terms, the new scale could not be put in force. By their agreement, England, Japan and the United States accepted increased import duties to the extent of 12½ per cent. in return for the abolition of the internal-taxation to which he referred. He himself had made certain proposals which were based very largely on the abolition of the old treaty port system, which confined foreigners to the ports mentioned and barred them from getting outside those regions. The result of that treaty port system was that merchants had to do all their business through middlemen and rarely came up against the principal. His idea was that a change should be effected, under which merchants might establish themselves both as to factories and to warehouses along the zones of the railways and the rivers,—say, a zone of five or ten miles broad. This would enable them to develop trade and could fairly be set against any possible loss that might come from an increase in taxation upon trade, though he contended that would be more apparent than real. Until something like this was done, the trade of this country with China would never attain the volume it ought to do, neither would China's trade as a whole be really important. This would be better understood when he pointed out that though the Chinese were one of the greatest trading nations of the world, by training and instinct, their trade per year with the outside world was now only something like 15/- per head of the population. The trade of the Japanese people before the war was something like £4 per head, and if China's trade could be brought up to anything like that level, it would mean there would be a net increase of one thousand million sterling per annum, which would be a revolution in China's commercial relations with the world at large. The fact that the Chinese were ready to develop on commercial lines was proved by the remarkable circumstance that quite recently when a French bank failed with liabilities of something like three million dollars in bank notes, the Chinese Bankers' Association immediately made itself responsible for the notes which had been issued. This was not only because they held some of the notes,

but because they wished to make good the banking credit of China.

In the matter of finance, he believed there was a great future before the people of China; they were careful, far-seeing and thrifty, and he believed that ere long great international loans would be floated in Shanghai as in other great cities of the world. Dealing with what he regarded as the pernicious way of looking upon China not as a great nation, but as a people who might absorb the products of other countries, he pointed out that this idea would have to go by the board. He understood that the question of what was called the open door, in China was going to be raised by Japan. Japan was going to propose not only the entire opening up of China, but the withdrawal of all foreign officials. This of itself might seem rather desirable from the Japanese standpoint, but the point with the Chinese was that they should decide for themselves. Many of the foreign officials who would be withdrawn under any such ruling had been in the country for a long number of years, and it might well be that the Chinese might desire to retain the benefit of experience. If this was so, they ought to have the right to retain it, and the point which would have to be admitted was that the Chinese alone should have the final decision upon all matters affecting Chinese life and development. On this point he, as one who had great experience in China and knew the feeling of the people, hoped and believed that Great Britain would stand by the Chinese, and that Great Britain's vote in the coming conference would always be given in the direction of giving the Chinese the right to decide for themselves.

The Present Condition of Japan's Commerce and Finance.

Reviewing the condition of Japan's commerce and finance, *Eastern Commerce*, the trade journal of the Far East, summarizes as follows:—

"The inflow of gold into Japan still continues despite the adverse trend of her external commerce, and there is too much capital in bankers' coffers. Money values again stand at lower points and form a factor which eclipses every other that may come into sight. Manufacturers in some lines are able to limit production and control prices, while speculators find easier means of creating buoyant fluctuations. The outward appearance of the Japanese business world at this moment is accordingly lively and stable. This is, however, an artificial turn and under this surface there is a dark current. Japan's external commerce is as heavily restricted as ever. In internal business circles the summer dead season has set in with unusual force and the dearth of new business is almost general. A great shrinkage in purchases of coal also signifies that industrial activities are still on the wane.

"Temporizing measures continue in favor with the Japanese business world in regard to the correction of its trend. On the score of the artificial plentifulness of capital, it is demanded that the Bank of Japan should lower its official rate, but no consideration is given to the evils which might result therefrom. The government also shows no intention of stopping the absorption of gold to normalise the money market, a step which is essential to the restoration to health of the business world. The total amount of gold to the account of Japan has been falling off for the last few weeks, but the reserve at home has been steadily increasing out of line with the main tendency in Japan's foreign trade.

"As regards the immediate outlook for the Japanese business world much uneasiness is

felt, and there is good reason to be anxious. The external trade continues to slacken and it is plain that if it is to be revived gold must be reduced. But no earnest effort is made to this end. On the strength of the plentiful supply of capital manufacturers and merchants endeavour to revive war prices and get rich quick without considering the evils their methods beget. Labour troubles at Osaka and Kobe cast a dark shadow on the future of industrial Japan, but leading business men do not reflect on the share they have had in the brewing of these troubles. Under cover of the rosy showing maintained at the expense of future and foreign trade a dark current is accordingly flowing. The silk trade shows that business is possible only at lower prices. In the cotton yarn trade also export business is possible only during the periods of reaction. Even in the stock market miscellaneous shares remain sluggish, often threatening to weaken and decline. The general export business is almost dead, a few special lines only showing any activity. Business men are beginning to show real anxiety over the situation, and Chambers of Commerce are holding meetings to discuss means of promoting export trade. It is certainly time some wise measures were devised, and it is to be hoped that those now in consultation will start at the root of the evil and use their utmost endeavours to bring about a reduction in prices all round. Artificially inflated prices have blocked business, and if persisted in will kill it entirely."

Financial Conditions in France and Germany

In an analysis of the financial status of France and Germany, the *American Exchange National Bank* of New York throws considerable light on conditions in these countries. It points out that no progress of any importance towards stabilization and normality can be made until the problem of balancing governmental receipts and expenditures has been solved.

"France has gone further in overtaking her expenditures with receipts than appears from a superficial study of her fiscal statistics. Her statistics indicate (they are not complete) a diminishing rate of increase in her public debt and a small decrease in circulation in June, 1921, as compared with December, 1920. As the revenue problem is lessened or made greater in accordance with progress or the lack of it in preventing an increase in the public debt and circulation, this evidence of a halt in expansion is distinctly important, for the fact tends toward making a basis for the erection of a tax program commensurate with the needs of the government. However, the French government continues to meet current expenditures with new loans, although not to the extent formerly in vogue; there have been no new internal offerings this year. The public debt has grown from about 150 billion francs at the end of 1918 to about 260 billion francs at the end of June, 1921, largely through increases in the floating debt, but also through large funding operations, especially in 1920. Expenditures have shown no important decrease from the 1918 level, annual expenses for the last three or four years having approximated about 50 billion francs, a sum largely in excess of the total public debt in 1913. Until 1920, revenue from all sources, including war salvages, was less than 20 per cent of expenditures, but in 1920 the ratio of revenue to expenditures was raised to about 40 per cent, and now stands at about that ratio. A further and important increase in the public debt seems unavoidable and is indeed to be expected, but the increase in the next year or so will probably not be as great as the statement indicates for there are several factors which are at work toward reducing probable expenditures, and

there are some offsetting items of probable income that are not enumerated, the most important of these being the amounts expected as indemnity from Germany.

"France's proportion of the reparations, assuming that it will be paid (a question to be discussed later) at current rates of exchange would give her a revenue from that source of about 4 billion francs a year, an important annual sum, but a sum that has only a minor bearing on the problem before France of adjusting her receipts to her expenditures, or vice versa. Her receipts this year will no doubt exceed 25 billion francs, and as a result of price deflation she should also show a decrease in expenditures above what might have been expected. Further probably important reductions in expenditures are to be looked for later on, but progress in this direction has been slow.

"France divides her expenditures into three classes:—(1) Ordinary; (2) Extraordinary; and (3) Recoverable. The extraordinary budget was reduced in 1920, partly through a slight actual decrease in expenses, but mainly through the transference of extraordinary items to the ordinary and the recoverable classifications. This year's estimated revenue of around 25 billion francs will more than cover ordinary expenses, but a deficit of approximately 18 billion francs under the heads of extraordinary and recoverable expenses will have to be carried over. Of this deficit, about 15 billion francs will be incurred on account of reconstruction and pensions, and is regarded as "recoverable," and about 3 billion on account of "exceptional war and extraordinary expenses." "Recoverable" doubtless refers to expectations in connection with the German indemnity, but unless France is able to convert into cash some of the bonds she receives from Germany, her indemnity receipts this year will be practically nothing, and next year will not be much in excess of 4 billion francs. It is apparent, therefore, that France is faced by a problem which must be mainly solved by internal measures, such as the reduction of expenditures, the modification of programs and higher taxes.

"Germany's fiscal position is even worse than that of France, but, although they arise from different causes, her problems are in many respects similar to those of France. It is probable, however, that aside from the indemnity, Germany's problems are more easily to be solved. The excess of German expenditures over receipts during the current year, exclusive of the indemnity, will approximate 34 billion paper marks. The current year's budget covering internal expenditures calls for about 93 billion marks, 59 billion marks of which are for ordinary expenses and are covered by estimated receipts. Although she has indulged in unusual methods in the manipulation of her currency, Germany is facing her tax problems in accordance with the dictates of a sound policy.

"Estimates made in September, 1920, fixed the German deficit for the fiscal year 1920 about 55 billion marks. This and subsequent deficits have been financed by treasury bills. On June 30, 1921, the total German public debt, exclusive of reparations, stood at something around 300 billion marks, and with the debts of the federal states added, the total German public debt approximated 325 billion marks. The last available estimate of the probable expenditures during the current fiscal year, as stated above, places the amount at about 93 billion marks, indicating a decrease of about 4 billion marks. This estimate also shows an increase in revenue of about 18 billion marks, the figures being 59 billion for the current year, against about 41 billion marks last year. Figuring the reparations payments at the equivalent of

70 billion paper marks, Germany, unless she is able to materially reduce internal expenditures, will evidently have to almost treble her revenue in order to meet her domestic deficits and at the same time pay the amounts due on reparations. Germany's growing internal debt is largely due to subsidies to her railroads, to currency expansion and to various other makeshifts which temporarily lighten the economic burdens of her population. She is charged with having sold billions of paper marks and paper mark securities all over the world and has been suspected of making at least a part of her reparations payments with funds raised in this way. France's debt growth has, on the other hand, been largely due to reconstruction payments and pensions, although she also has subsidized her railroads, as indeed has nearly every country in the world. France is also maintaining a large military establishment, and Germany is not, and that fact is of considerable importance in a study of the relative economic positions of the two countries.

"Germany's problem of meeting reparations is so overwhelming that it immediately destroys the parallel between her position and that of France. If the reparations payments could be made within her own borders, her task would become relatively simple. In order to meet her obligations taken under the London settlement, Germany must pay the allies not less than \$500,000,000, and possibly as much as \$950,000,000 a year. She can only pay these amounts by exporting goods of equal value in excess of her imports. In 1913, with her resources in Alsace-Lorraine, the Sarre, Silesia and her colonies unimpaired, Germany was just about able to balance her visible exports with her imports. Invisible exports, of which there are only estimates, probably gave her a favorable balance in her trade with the world, but she is now practically without shipping, the foreign activities of her insurance companies have been severely curtailed, and it is probable that she has had to sell most of her foreign securities, so that nearly all her means of carrying on invisible exports have been destroyed. In 1913, raw material and food imports amounted to about 65 per cent of the total imports, and as any expansion of production would involve an increase in the import of raw materials, which alone in 1913 amounted to 35 per cent of the total imports, any saving she may make through economies in imports will evidently have to be accomplished through decreases in food consumption and within the margin covered by goods other than food products and raw materials. Germany's production from her own raw materials competes with similar production in England, France and this country, and steps have already been taken in each of these countries to shut out these goods with the aid of tariffs. In 1913, Germany's exports of iron and steel, machinery, coal, woolen and cotton goods amounted to 40 per cent of her total exports. Germany's monopoly production, both in raw materials and manufactured goods, is infinitesimal. The refusal of the industrial countries to receive German goods, notwithstanding that some of them would benefit through reparations payments, therefore means that Germany must depend upon her trade with raw materials on countries such as the South American countries and Russia in her effort to build up her exports to a point that will enable her to pay reparations. For a time her exchange position will doubtless enable Germany to successfully compete in these markets, but despite her apparent policy of continuous inflation, her advantage is likely to be short-lived, for it is due mainly to the fact that gold depreciation has been less important in Germany than in any other country, and it can be only a matter of time until gold prices in Germany and the rest of the world come together."

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

First Meeting of the New Executive Council

The new Executive Council elected at the annual convention in June held its first meeting at the head office, Toronto, on Wednesday, September 7. The president, W. S. Fisher, was in attendance from St. John and quite a number of members of council from points outside Toronto were present. A welcome visitor, in the person of Ben. H. Morgan, chairman of the Council of the British Empire Producers' Association, was given a seat at the president's table.

The register of those present included:—W. S. Fisher, St. John; John R. Shaw, Woodstock; Thomas Roden, Toronto; J. H. Fortier, Quebec; John M. Taylor, Guelph; C. B. Lowndes, Toronto; F. W. Stewart, Montreal; R. Thomson, Carleton Place; J. O. Thorn, Toronto; Joseph Daoust, Montreal; J. E. Warrington, Quebec; G. M. McGregor, Ford; L. L. McMurray, Toronto; P. E. Joubert, Montreal; John F. Ellis, Toronto; A. F. Hatch, Hamilton; J. F. M. Stewart, George Brigidon, T. F. Monypenny, Toronto; J. H. Baetz, Kitchener; F. S. Hodgins, Kitchener; H. J. Waddie, Hamilton; S. R. Parsons, C. J. MacFarlane, W. H. Shapley, W. C. Coulter, T. A. Hollinrake, Toronto; Hon. N. Curry, Montreal; Edson J. Pollard, Niagara Falls; B. W. Coghlin, Montreal; L. L. Anthes, Toronto.

Programme of Membership Committee for Year

The Membership Committee are proceeding along the following lines in regard to membership work this year. The Head Office is continuing to compile the non-members' list from the Commercial Intelligence Department records, returns from Municipal Clerks, press clippings and all other sources. This list is sent to the Secretaries of the five Divisions to revise and supplement from their own records. After careful consideration it was thought inadvisable to engage either in a national membership campaign or special division membership campaigns this year owing to the trade depression. Special efforts, however, are being made by the divisional organizations. In Ontario, last year, four special parties were organized to visit twenty industrial cities and towns in the province, with beneficial results to our membership work. It is proposed to repeat this plan in Ontario again this year if conditions warrant, and to try it in Quebec. In the Prairie and British Columbia Divisions, membership work will be done by the secretaries of these Divisions who will make trips through their territories and organize the work in the chief centres. The Maritime Division propose to conduct a membership campaign in St. John and Halifax. The regular methods, correspondence, follow-up

letters, personal calls, invitations from present members to non-members, will, of course, be continued throughout the country.

"Your Committee beg to point out that while securing new members is important, the retention of our present membership is even more important. A special pamphlet has been prepared setting forth the services which the Association can give its members and the reasons why every Canadian manufacturer should belong to the Association. A copy of this pamphlet is included with every bill which is sent out for fees. The Assistant Treasurer sends out to all divisions a list of membership fees falling due in each division during the next months and in this way secures the co-operation of the divisional organization to retain present members. Your Committee ask for the assistance of all present members in their work this year."

Ontario Division Holds Large Luncheon Meeting

A well-attended luncheon meeting of the Ontario Division was held at the King Edward Hotel on Wednesday, September 7, with Ben. H. Morgan, chairman of the board of the British Empire Producers' Organization as the guest of honor. The chair was occupied by the president of the C. M. A., Mr. W. S. Fisher and seated at the head table were several prominent manufacturers and representative citizens. Mr. Morgan gave a very lucid and straightforward explanation of the objects of the organization, told of its progress and awakened considerable enthusiasm among his hearers for the promotion of inter-Empire trade.

President Fisher Attends Exhibition Luncheon

President W. S. Fisher was principal speaker at the directors' luncheon on Manufacturers' Day, September 8, at the Canadian National Exhibition, Toronto. Quite a large number of representative manufacturers were guests of the directors at the luncheon, which was presided over by George T. Irving.

Mr. Fisher, speaking first as a representative from Eastern Canada, said that the East fully appreciated the national value of the Exhibition in Toronto. Canada, he declared, was facing a situation right now more serious than any since its foundation. It had been stated that fertile fields, busy shops and transportation were sufficient to make a great country, but Canada had more, because to these three must be added mines, forests and fisheries. Quebec and Ontario were the great central part of the Dominion, and if any other part of the country was injured they,

too, must feel it. Mr. Fisher exhorted his manufacturing friends and others who produce to insist that Canadian railways carry the production for export to Canadian ports and that Canadian products be carried in Canadian ships.

"See to it as far as you can that your trade is routed where it will give employment to Canadian workmen. It is an East-and-West movement we require. There is also the Empire traffic. We are on the route. Let us have full advantage of it."

Mr. Fisher pointed out that in 1929 Canada imported goods from the United States to the value of two and a half millions a day, and sold to the United States goods to the value of a million and a half a day. He wanted to know if such a condition was in the national interest. He believed the difference could be cut down considerably.

In manufacturing, he said, in 1881 Canada's trade was three hundred millions and had increased 13 times by 1920.

"Canada's foreign trade for past year in wheat amounted to \$182,000,000; in paper, \$89,000,000; iron and steel, \$62,000,000; flour, \$61,000,000; lumber, \$121,000,000; pulp, \$73,000,000; animals (living) \$42,000,000; fish, \$40,000,000; bacon and ham, \$42,000,000; butter, \$18,000,000; cheese, \$40,000,000; coal, \$18,000,000; textiles, \$19,000,000; vegetables, \$16,000,000; automobiles, \$18,000,000."

Made-in-Canada Promotion at Fall Fairs

Valuable work was done, at the instance of the General Manager and under the auspices of the Publishing Committee, in bringing to the attention of visitors to exhibitions and fall fairs throughout Eastern Canada the desirability of supporting home industry.

A large card bearing the words "Keep Your Fellow Canadians Employed By Buying Canadian Products and Manufactured Articles"; a small card bearing the words, "Produced in Canada"; and a pamphlet headed "Something That Concerns You", giving a list of articles imported that should have been bought in Canada, were prepared for distribution at these exhibitions.

Arrangements were made with the manager and directors of the Toronto Exhibition to have the large cards widely distributed throughout the Exhibition, the small cards placed on individual articles of Canadian manufacture and growth, and the pamphlets distributed at large by our own members. Similar arrangements were made for Ottawa and London.

In Quebec Province copies of this literature were sent to the Montreal office with instructions to have it translated into French and a similar campaign carried out in that province. Mr. Loranger, travelling Quebec Secretary, attended several of the exhibitions and distributed copies of both French and

English cards and reports that a very excellent reception was accorded them.

For the Maritime Provinces arrangements were made to have Mr. Thompson, Secretary of the Division, carry on a similar campaign for his Division.

The Prairie Province exhibitions were over before this campaign got underway, and in British Columbia, a Made-in-British Columbia campaign has been vigorously prosecuted for some time.

To extend the campaign to the country fairs a letter was sent asking our members in towns holding fairs to undertake the distribution of cards and pamphlets at these fairs, and about sixty of them have agreed to do so, and literature has been sent to them. This system is also being carried out in Quebec and Maritime Provinces.

For exhibitions in places where the Association has no members a letter was sent out to the secretaries of the exhibitions enclosing a copy of the two cards and pamphlet asking their co-operation in giving distribution to these and advising that quantities of this literature were available if they would undertake to see to their distribution.

There were printed 5000 of the large cards, 11,000 of the small cards and 250,000 pamphlets, and additional copies may be secured if found necessary.

The number of exhibitions being held this year is as follows:—

Ontario.....	324
Quebec.....	78
Maritime Provinces.....	27
Total.....	429

As there is an attendance of something over a million at the Toronto Exhibition and from two thousand up at even the smaller exhibitions it is hoped to reach a very large number of citizens by this method.

New Members Elected to the Executive Committee

Pursuant to By-law No. 15 of the Association's Constitution, which requires that two of the six elected members of the Executive Committee shall retire each year and that two members of the Executive Council shall be elected in their places, action was taken at the September meeting of Council. The retiring members were Hon. E. J. Davis, Newmarket and W. H. Shapley, Toronto. Those elected in their stead were John M. Taylor, Guelph and H. H. Champ, Hamilton.

Results Obtained Under Income War Tax Act

The Legislation Committee made the following report on the working of the Federal Income Tax law at the September meeting of the Executive Council:—

"Under an amendment of the Federal Income Tax Act, 1921, considerable modifications of the penalties in the original Act were introduced effective as on 1st June, 1920. It may be proper to summarize for the information of the Council, the results obtained under the Income War Tax Act.

"Down to the end of the last fiscal year (March 31st, 1921), \$227,723,892 was collected by direct taxation on income and profits. Out of this total the amount contributed by farmers was \$1,488,332. The amount collected under the income tax was \$75,989,645. The farmers' contribution is under 1-50 of the income tax alone, the percentage being .0195.

"The Ontario total collections were \$111,273,069, made up of \$78,616,596, collected under the Business Profits War Tax Act, and

\$32,656,473 collected under the Income War Tax Act. The total amount paid by farmers was \$142,830, representing a fraction of 1-230 or a percentage of .0044 of the year's income tax receipts.

"In the year ending March 31st, 1921, Ontario ratepayers paid \$20,013,796 in income taxes. The total number of rate-payers was 72,560. In this year, the total amount paid by farmers of the whole province was \$40,973, and the total of farmer taxpayers was 1,870.

"The estimated population of rural Ontario is 40 per cent. of the whole.

"The result is that only 187 out of every 100,000 of the rural population paid taxes, as against 4,150 out of every 100,000 of the urban population; that while rural Ontario has a population of 2-5 of the whole, it contributes less than 1-500 part of the income taxes raised, or in percentages, .002047.

"It is believed that the bulletins issued at different times by the Legal Department to our membership, explanatory of the provisions of the law have contributed materially to relieving the difficulties experienced by corporations with respect to annual returns and tax incidence."

Membership Grows in Spite of Higher Fees

Reporting to the September meeting of the Executive Council, the Membership Committee gave the following information on membership standing:—

"The Association suffered a net loss of membership in only two years of its history; namely, 1908, when the loss was 4; and 1916, when the net loss was 78. Both these years were years of trade depression.

"Owing to the trade depression beginning about the middle of last year and continuing till the present, the task of retaining old members and securing new members has occupied unusual care on the part of the Membership Committee. Last year not only was a loss avoided, but a net gain was registered, the total applications being 447, and the total resignations 277, a gain of 170. The increase in membership fees authorized at the last annual meeting, though necessary from the financial point of view, has increased the difficulty of your Committee's membership work. Nevertheless, we are able to report a net gain for the four months May, June, July and August, 1921. 174 new applications have been received and 150 resignations accepted, leaving a net increase of 24. The cause of these resignations are analyzed as follows:—

Out of business.....	71
Arrears in fees.....	35
Amalgamations.....	11
Resigned without giving reason.....	33
Total.....	150

"It will be observed that nothing could be done to retain the membership of 117 out of the 150 firms that resigned. Included in those out of business are a considerable number which engaged in manufacturing during the war and have now ceased manufacturing. No firm is struck off for non-payment of fees until every effort is made to secure payment."

Ontario Workmen's Compensation Board Vacancy

In view of persistent rumors that the vacancy on the Ontario Workmen's Compensation Board was to be filled by appointment of a labor man, representations were made by the Industrial Relations Committee to the provincial government, re-affirming the posi-

tion which has always been taken by the committee, namely that the principle of class representation should not be introduced but that the Board should be kept a purely judicial body.

New members Elected to the Transportation Committee

At its September meeting, the Transportation Committee, added the following names to its membership:—

F. A. Nancekivell, Ford Motor Company, Ford; Henry Bertram, John Bertram & Sons Co., Dundas; Chas. Waterous, Jr., Waterous Engine Works Co., Brantford; F. W. Dean, Steel Co. of Canada, Ltd. Hamilton; A. H. Thorpe, Wm. Davies Co., Toronto; W. S. Campbell, Canadian General Electric Co., Toronto; W. R. Ingram, Swift Canadian Co., W. Toronto; R. P. D. Graham, Goodyear Tire & Rubber Co., Toronto; A. D. Huff, Riordon Pulp & Paper Co., Montreal; Alex. W. Bell, General Motors of Canada, Oshawa; E. T. Mason, Mason & Gordon, Montreal; Chas. O. Shaw, Anglo Canadian Co., Ltd., Huntsville; J. D. Palmer, Hartt Boot & Shoe Co. Ltd., Fredericton, N.B.; H. J. Bigger, American Can Co. Ltd. Vancouver, B.C.; F. E. Hamilton, Swift Canadian Co., Ltd., Winnipeg, Man.; T. Reynolds, Quaker Oats Co., Saskatoon, Sask.; W. J. Harper, Robinhood Mills, Moose Jaw, Sask.; Wm. Innes, P. Burns & Co., Calgary, Alta.

Association Welcomes the French Sample Train

On several occasions during the past two years, the Association has been asked to recommend that a train carrying Canadian goods should be sent through France and that a French train carrying French goods should tour Canada. The decision of the Executive Council was that it was not practical to send a Canadian train through France, but that, if a French train were sent through Canada, the Association would extend a welcome and co-operate as far as possible. When, therefore, the Association was notified that a Franco-Canadian Sample Train would be sent through Canada, all Divisional Secretaries were notified and sent a copy of the itinerary of the train. The Association, however, has not incurred any expense. The Franco-Canadian Sample Train is now touring Canada exhibiting a large variety of French products.

International Labor Conference at Geneva

The Industrial Relations Committee reported to the Executive Council on September 7, that Mr. S. R. Parsons, chairman of the Committee, had been appointed to act as representative of the employers of Canada at the International Labour Conference to be held in October at Geneva. The choice of the one advisor allowed by the Dominion Government was left to the General Manager and Mr. E. B. Robertson has now been nominated.

The agenda for the Conference includes the following questions:—

1. The adaptation to agriculture of the conventions passed at Washington relating to hours and conditions of labor.
2. The prohibition of the use of white lead in the making of paint.
3. The disinfection of wool infected with anthrax spores.

In the light of the experience gained at Washington it was felt by the Committee that

it would be highly desirable that the Dominion Government representatives should be given definite instructions as to the action they should take and representations to this effect were made to the Dominion Government. It is satisfactory to be able to report that definite instructions have been given to the Canadian Government representatives, partly no doubt because on this occasion those representatives are to be, not Cabinet Ministers, but rather junior officials.

Co-operation With British Empire Producers

The British Empire Producers' Organization, headquarters, London, England, represents the leading producing associations, both manufacturing and agricultural, throughout the British Empire. One of its chief objects is to secure for Empire products larger markets within the Empire by tariff preferences and other means. Mr. Ben. H. Morgan, chairman of the council of the British Empire Producers' Organization, has been visiting Canada and the Association co-operated in assisting him to arrange his itinerary and to secure information. Mr. Morgan believes strongly that the sale of Canadian products can be greatly increased in the various countries of the British Empire, especially if wider tariff preferences can be arranged. He also believes that additional British capital will shortly be available for investment in Canada. The Executive Committee are now investigating the possibility of co-operating more closely with the British Empire Producers' Organization.

Popular Official of Association Married

On Thursday, September 15, the marriage took place at Orwell, Ontario, at the summer home of the bride's parents of Stuart B. Brown, assistant manager of the Transportation Department, C.M.A. and Miss Nessie Evans of Toronto. Mr. Brown has been a member of the staff at headquarters since 1912 and in his nine years of service has made many friends among the membership through his courtesy, zeal and efficiency.

The head office staff and the division secretaries combined to present Mr. and Mrs. Brown with a handsome chesterfield, the presentation being made by the General Manager, Mr. Walsh, who spoke in appreciative terms of Mr. Brown and wished him and his bride all happiness.

Pamphlet on Wages Sent to the Membership

The United States Government printing office at Washington has issued a pamphlet showing a comparison of wages paid in United States industries, with the wages paid in the same industries of foreign competing countries. These statistics show that the wages paid in these countries are very much lower than the wages paid in the United States. As wages in Canada and the United States are very similar, the same comparison holds true as regards Canada. Copies of this pamphlet have been forwarded by the Association to the Minister of Labor and the Minister of Finance. The Minister of Labor has been asked to compile a similar comparison for Canada. Such a comparison would prove that labor absolutely requires the pro-

tection of the Canadian Customs tariff. Five thousand copies of this pamphlet were secured from Washington and distributed to the members of the Association with a circular asking them to bring the wage comparison to the attention of their employees to show them the necessity for tariff protection.

Industrial Relations Committee on Unemployment

Reporting to the September meeting of the Executive Council, the Industrial Relations Committee dealt as follows with the subject of unemployment:—

"The Dominion Government at the beginning of July decided on a policy of urging the various Provincial Governments to take steps to see that the anticipated unemployment during the autumn and winter should be dealt with by the different local authorities. This, in the opinion of the Dominion Government, was infinitely preferable to any scheme of unemployment relief administered from Ottawa. Accordingly the Minister of Labor wrote to the various provincial governments urging that they should take steps along the lines indicated and suggesting that later in the year a conference might be held of representatives of the provinces to deal with any questions which might call for concerted action.

"The various provincial governments, so far as it is known, have accepted the recommendation of the Dominion Government and are taking steps accordingly, though the Ontario Government has made what your Committee considers to be the mistake of attempting to deal with the question through a small committee sitting in Toronto. This, in the opinion of your committee, is a distinct departure from the scheme outlined by Senator Robertson which called for putting the responsibility upon the various local authorities rather than setting up a central committee to deal with a problem which varies from district to district throughout the whole province. It only remains to add that the attention of the Ontario Government has been called to this departure from the scheme as outlined by Senator Robertson, which scheme your committee considers to be sensible and sound."

Recent Publications and Bulletins

318, June 30, 1921.—This is a 24-page pamphlet with cover, containing the Sales Tax Amendments effective May 10, 1921, together with copy of the Sales Tax Act, with rulings and explanations. Issued by the Tariff Department.

319, July 30, 1921—Bulletin re convention number of Industrial Canada and the Printers' Strike. Issued by Publishing Department.

320, August 8, 1921—Letter sent out by Commercial Intelligence Department in connection with publication of booklet on "Export Trade Conditions," and asking for replies to a series of questions.

321, August 12, 1921—Bulletin re regulations for marking country or origin on imported goods. Issued by Tariff Department.

323, August 23, 1921—Letter sent out by Tariff Department to accompany pamphlet published by Government Printing Office, Washington, which gives comparisons of wages paid in chief industries of a number of manufacturing countries.

324, September 2, 1921—General letter signed by the President and the General Manager, explaining what the Association is doing to promote "Made-in-Canada" and urging members to take every precaution to see that their own purchases conform to the "Made-in-Canada" rule.

325, August 31, 1921—Circular letter sent out by Publishing Department with regard to the Canadian Tariff Association.

326, September 21, 1921—Circular letter issued by Legal Department covering digest of legislation affecting manufacturing introduced during past year in Dominion Parliament and Provincial Legislatures.

327, September 21, 1921—Circular letter issued by Legal Department explaining present position with regard to company cases and intimating that a conference of various interests concerned will take place.



Victim of the Staff's Merry Attentions

When Stuart B. Brown, Assistant Manager of the Transportation Department, entered his office on the day before he left to be married, he found the place transformed into a bower of beauty, lavishly decorated with streamers, flowers and various ornamental designs, which were calculated to give a fitting send-off to the bridegroom-to-be. Our photograph shows Mr. Brown attempting to work in the unaccustomed surroundings.

News of the Month from Maritime Division

Headquarters of Division—Amherst, Nova Scotia

Chairman.....	L. W. Simms, T. S. Simms & Co., Ltd., St. John, N.B.
Vice-Chairmen.....	C. S. Sutherland, Amherst Boot and Shoe Co., Ltd., Amherst. J. A. Marven, J. A. Marven, Limited, Moncton, N.B. J. E. McLurg, Halifax Shipyards, Limited, Halifax, N.S.
Secretary.....	H. R. Thompson, Box 470, Amherst, N.S.

IT is anticipated that a general enquiry will be made, at an early date, into all phases of railway transportation conditions affecting the industries of the Maritime Provinces. In preparation for this, the Maritime Division has started making a survey of rates applying over a period of years to each class of industry carried on within the Provinces. This survey is to cover the securing of raw materials as well as the shipment of finished products, and will include a comparison with the rates and conditions affecting competitors located elsewhere in Canada. The intention is that a brief will be made up outlining the conditions under which each industry is being carried on and where the result of the study shows that an industry is being unjustly or adversely affected, an application for the desired adjustment will be made. The survey should prove of considerable advantage in an educational way and for this reason alone, should be well worth while. It will be the most comprehensive study ever undertaken as regards freight rates and conditions affecting the industries of the Maritime Provinces.

Education in Accident Prevention

Authority has been secured, from the Superintendent of Education for Nova Scotia, to approach the chairman of the local school boards throughout the province, for permission to have the Field Officer of the Nova Scotia Accident Prevention Association, visit the schools in the industrial centres and give short talks to the pupils on the problem of accident prevention. We are of the opinion that these talks to the pupils will be a very successful medium for spreading the safety gospel. We are hoping that we will reach, through the children, the men now working in the industries, and at the same time inculcate the idea of safety in the minds of these children, so that the future workers in industry will already have adopted the safety principle.

The Superintendent of Education is interested in the scheme and in the last issue of the Journal of Education and under the heading "General Duties of Teachers" has included the item "Care against accidents" with the instructions that oral lessons or talks be given the pupils when appropriate and convenient. A statistical summary of accidental deaths occurring over a period of years, both in and outside of the industries, also appears in the Journal for the information of the teachers and in an endeavor to impress them with the importance of the problem.

Part Time Education

Intimation is given in the last issue of the Journal of Education, of Nova Scotia, to the effect that compulsory "Part-time" attendance laws, for pupils from 16 to 18 years of age living in industrial cities and towns, are being drafted. The intention is that those employing pupils up to 18 years of age must adapt the employment to a definite number of hours attendance at certain specified classes.

The Secretary of the Maritime Division has conferred with the Superintendent of Education for Nova Scotia and is assured that the interested employers will be given ample opportunity for discussing the provisions with the educational authorities in

order that, so far as possible, no contentious or impracticable provisions will appear in the bill when it is presented to the Legislature at the next session.

The Secretary of the Division will appreciate receiving the views and comments of any members of the Association who have had experience with similar legislation in other jurisdictions.

Hydro-Electric Power

Now that cheaper power for the City of Halifax is practically assured, it is interesting to recall a resolution which was passed at a meeting called by the Divisional Secretary, of the members of the C.M.A. located in that city, and which perhaps was the first definite move toward influencing the Provincial Power Commission to take over the site at St. Margaret's Bay and rush the development to completion. The resolution read as follows:—

"RESOLVED: That this meeting of the Halifax members of the Canadian Manufacturers' Association, assembled at Halifax, Tuesday morning, November 25, 1919, strongly endorses the proposed development, as relating to the City of Halifax, of Hydro-Electric Power by the Nova Scotia Power Commission.

"FURTHER RESOLVED: That this meeting strongly recommends to the Halifax City Council their endorsement and co-operation in bringing about at the earliest possible date, this most desirable development.

"FURTHER RESOLVED: That copies of this Resolution be submitted to the Provincial Government and City Officials concerned."

It is anticipated that the formal opening of the power plant at St. Margaret's Bay will take place in the very near future. Halifax then expects to be able to get current for about half of the present rates. The city council has voted to purchase the power from the Provincial Power Commission, but the method of distribution however is still unsettled. The problem is:—Shall the city construct a distribution system, or shall it sell the power to the Halifax Tramway Company which Corporation is now producing power from coal and distributing throughout the city? In the latter event, the question is,—can safeguards be provided which will insure the consumers receiving the benefit of the cheaper production?

Similar conditions will probably arise in connection with the Hydro-Electric scheme which is being developed by the New Brunswick Power Commission in the vicinity of St. John, and a meeting of the St. John manufacturers was held on Friday, September 2nd to consider what action should be taken towards having the power delivered to the industries at the lowest possible rates. The Premier, the Mayor of the City and the Chief Engineer of the Power Commission, attended the meeting and discussed, with the manu-

facturers, all phases of the problem. The consensus of opinion seemed to be that power should be sold to the industries at the rate charged by the Government Commission to the distributing organization plus a certain known and fixed overhead charge to cover the cost of the distribution.

The selling price to the consumers will depend almost entirely upon the aggregate amount of consumption and in order to insure sufficient consumption to enable the hydro power being sold at rates substantially lower than those now being charged for steam power, it will be necessary to quote rates for industrial purposes which will make sufficient saving in the cost of power to encourage the industries to change over from steam to electrical driven machinery.

Any reduction in cost of power to the industries should reflect an increased activity and the general public would be indirectly benefitted thereby. No definite policies can yet be stated by the provincial and civic authorities so a committee of the manufacturers was appointed to follow up this conference.

The Maritime Division has been persistently advocating the necessity for cheaper power production and it should be encouraging to the manufacturers to review the rapid strides which have been made toward this end within the last few years.

Fire Prevention

A fire marshal's act, similar to those in force in other provinces was passed at the last session of the New Brunswick Legislature and the administrative board, as provided for in the act, was organized on September 1st, and comprises M. B. Edwards, chairman; Charles Robinson, Secretary; Hugh H. McLellan, Fire Marshal. Arrangements were made to put the act into effective operation at once.

Acting in co-operation with the National Fire Protection Association, the Secretary of the Maritime Division, called on the Premier of the Province and the Fire Marshal to discuss what action can be taken in New Brunswick towards the observance of October 9th, which date is to be proclaimed—National Fire Prevention Day—all over Canada and the United States.

In view, however, of the recent organization of the Fire Prevention Board, no definite program could be decided on; but the matter is to receive further consideration in the immediate future. The Nova Scotia Board is now making plans for the proper observance of the Day in that Province.

Airplanes in Forest Protection

By a co-operative arrangement between the Air Board of Canada and the Dominion and provincial forest services, airplanes are being tested this season in five provinces in the work of forest surveying and forest protection. The provinces in which airplanes are operating are Quebec, Ontario, Manitoba, Alberta and British Columbia. The use of machines of different types, tested under different conditions, will by the end of this season give an immense amount of information in regard to the usefulness of airplanes for this work. The officers of the Air Board, the Dominion Forestry Branch, and the different provincial forestry departments are following the results of this season's operations with close interest, and will be guided by them in laying out future work.

This Month's Activities in Quebec Division

Headquarters of Division—113 Board of Trade Building, Montreal

Chairman.....J. H. Fortier, P. T. Legare, Ltd., Quebec.
Vice-Chairman.....F. W. Stewart, Cluett, Peabody & Co., of Canada, Ltd., Montreal.
Secretary.....R. W. Gould. Travelling-Secretary.....L. D. Loranger.

ACTIVITIES in the Quebec Division are opening with a rush, and the indications are that we will experience one of the busiest seasons in our history. The opening meeting of the Montreal Branch Executive was held on Wednesday, September 14th, when B. W. Coghlin, the new chairman, tendered a complimentary luncheon to the members of his Executive. An important agenda was discussed and dealt with.

An enthusiastic meeting of the Quebec Division, being the curtain raiser for the fiscal year, was held at the Sanitorium Hotel in Three Rivers on Friday, September 23rd. There was a good attendance from Montreal, Quebec and other important centres in the province, while the Three Rivers members were out in force.

It may be pointed out in passing that the Three Rivers Branch is the baby of the Division, having been formed last fall, and is making steady progress, and growing in strength and importance.

The visiting members of the Executive were pleased indeed to note that the City of Three Rivers is not feeling seriously the depression and that manufacturing activities are being carried on very nearly at normal.

New Members Accepted

The following new members were introduced and accepted into the Association at the last meeting of the Executive:

J. Barsalou & Co., Limited.....Montreal
Canadian Perfume Co., of Canada Montreal
Regal Kitchens.....Montreal
Anglo-Canadian Lumber Co. Iberville, P.Q.

Visit of Ben H. Morgan

Ben H. Morgan, chairman of the Board of Directors of the British Empire Producers' Organization, was entertained by the Montreal Branch at a luncheon held in the Windsor Hotel, Oak Room, on Friday, September 2nd. More than 100 members were present, who listened with great interest to Mr. Morgan's address.

Mr. Morgan, during his two days' stay in Montreal, held conferences with the pulp and paper manufacturers; the wood box manufacturers; the millers of Montreal, and other important manufacturers with a view to furthering trade between the British Dominions.

Exhibition Publicity

A total of 2,500 "Made-in-Canada" cards were distributed during the past month at 78 local fairs and 4 provincial fairs in the Province of Quebec.

For the Province of Quebec the cards were printed in both languages, and not only did manufacturers exhibiting their wares greet these cards with enthusiasm, but the farmers of the Province of Quebec were proud indeed to place them upon the splendid cattle, vegetables and other farm products which were displayed. Housewives of Quebec were equally as proud to have them attached to their fancy work and other delicate hand work which they exhibited.

In nearly every case the cards were taken home by the exhibitors, and where business houses are concerned are being displayed on their factories in prominent places.

United States Branch Plants

In spite of the fact that business activities are sub-normal, there have been during the

past month or six weeks an ever increasing number of United States manufacturers coming to the Province of Quebec, seeking sites for subsidiary plants. Feather manufacturers; boot and shoe manufacturers and others have visited the office of late, seeking information, advice and guidance on these questions. It would seem, on inquiry from these men, that the provisions of the recent Fordney Bill, passed by the United States Congress is having some effect in inducing these manufacturers to come to Canada, together with the fact that they are anxious to secure the benefits of the British preference and be on the ground in appealing to the Canadian market. The indications are at the present time that the next twelve months will see an influx of American capital into Canada for the purpose of establishing manufacturing plants greater than has ever been seen before.

Several Trade Sections Meet

Trade Section activities are picking up very rapidly. Within the past ten days, meetings of the Graphic Arts Section; the Wooden Box Section; the Paper Box Section; the Candy and Biscuit Section; Paint and Varnish Section; Lithographers' Section and several other sections of the Association have been held.

Our members are returning from holidays and are turning their attention to business activities, and an interest exceeding that of previous years is being taken in the Association and its work.

What may be considered as an encouraging sign is that during the past few months when many problems have arisen, due to the falling off of business, our members have called upon the Association for assistance. Inquiries of all kinds are being received and satisfied so far as possible, and members have concurred in the past two months in their statement that it is when business is slack and times are dull that the Association is of the most value to its members.

Business Conditions in Quebec

A survey of industrial, commercial and agricultural conditions in the province of Quebec at the beginning of the month was prepared by the Division Secretary. This showed that, taken as a whole, the province was in quite as desirable a position as any other province in the Dominion.

"In the centres of population where I have made investigations," writes Mr. Gould, "I found that optimism prevails in spite of the fact that industrial activities are at a low ebb. Only one centre in the province, namely Montreal, is faced with an unemployment situation which will demand courageous treatment. In Quebec, Sherbrooke, Three Rivers and other industrial centres, this situation is not of such a character as to cause undue alarm."

It is pointed out that the Government of Quebec is financially in a position to provide relief, when necessity arrives, through the prosecution of public works. Savings banks, particularly in country districts, show a greater amount of cash than at any time in the history of the province, and very few victory bonds have been discounted or placed in banks as collateral. During the summer a large number of United States manufacturers

have sent emissaries seeking sites for subsidiary plants.

In Montreal it is estimated that 70 per cent. of all manufacturing plants are operating below normal and that probably 20 per cent. of the 70 per cent. are practically idle. August probably marked the peak of the depression, as since then a gradual improvement has been noticed. It is estimated that there are as many unemployed in the city as in the middle of last winter, in spite of the movement to the harvest fields of the West. Wages are being fairly well maintained. Farmers adjacent to Montreal have had a prosperous year.

Quebec City has so far escaped an extreme of unemployment but indications are that industry will be unusually quiet during coming winter. Agriculture around Quebec has been disappointing, crops averaging only 60 per cent. of normal. Retail trade in Quebec is quite as good as a year ago and building is active.

Three Rivers is suffering from a reaction following very rapid expansion during the past three years. The bulk of the mills are working with reduced staffs and on part time. About 25 per cent. fewer people are employed than a year ago. Farming community around Three Rivers is prosperous, though crops are smaller. Retail trade is about 20 per cent. less than a year ago.

In Sherbrooke conditions are not as bad as in some other sections of the province. The iron industry is quiet; hosiery and silk factories are active; woollen industry is in good shape and cotton industry fairly busy. In adjacent farming districts, crops have been light. Industrial activities are on the increase generally and the outlook is for considerable improvement.

Mr. F. G. Daniels, General Manager of the Dominion Textile Co., and Vice-Chairman of the Montreal Branch of the Association is absent on a business trip to the United Kingdom.

Members Urged to Follow Made-in-Canada Rule

The attention of members was again directed by a circular issued on September 2, to the desirability of taking every possible precaution to see that their purchases conformed to the "Made-in-Canada" rule that they would like to see observed in their own line. Members were further requested, in his circular, to bring to the attention of the nearest office of the Association any instances coming to their notice where large orders for goods were being placed in other countries that could be filled in Canada.

"The Association has repeatedly urged Dominion, Provincial and Municipal Governments and other public boards and bodies to set an example by refusing to send money out of the country to buy goods which are made in Canada, and our representations have resulted in a fair measure of co-operation. Notwithstanding this, information has been received from time to time, and the Customs returns show that orders for goods which are produced in Canada are being sent out of the country by many classes of purchasers.

"One question at the moment that is pressing itself on the attention of your various Committees is unemployment. A great percentage of unemployment is caused by the unnecessary importation of goods from other countries. It is obvious that factories cannot operate fully unless they are able to dispose of their products."

Ontario Division's Activities for the Month

Headquarters of Division, Bank of Hamilton Building, Toronto

Chairman.....W. C. Coulter, Booth-Coulter Copper and Brass Co., Ltd., Toronto.
 Vice-Chairman.....A. W. White, Geo. White & Sons Co., Ltd., London.
 Secretary.....H. Macdonald. Travelling Secretary.....O. C. Pease.

WITH an open mind to ideas and the quest for solutions, the Ontario Division approaches another season's work with the assurance that by the same co-operation which has characterized the work of the past, further and better results lie in the future. It has taken years to build the Association up to its present position and usefulness, and it has given evidence that it is a permanent and still growing institution.

Industry is showing a tendency to improve gradually and a recent encouraging sign was the number of firms which were exhibiting their goods at the Canadian National Exhibition. Some of the larger local plants are looking forward to resuming operations.

From general reports, there appears to be quite an improved tone in wholesale trade and all departments are looking for a better trade as the fall draws nearer.

No doubt one of the principal reasons for the belief in recovery is found in the fact that one of the greatest handicaps to industrial recovery namely:—higher wages and cost of production, has been in large part, overcome. Wages have been on the down-grade for over a year, and in the case of some industries, the scale has been reduced to within a short distance of the pre-war level. In more than one industry, such as iron and steel and textiles, the original cut was found to be insufficient to meet the situation and was followed by further cuts, until at last it can be said that wages in these lines are no longer preventing resumption of consumption. Throughout the whole industrial field, wages have been coming down and there is every reason to believe that during the coming winter, reductions will go into effect more or less automatically in all branches of industry which have as yet not borne their share of the readjustment.

Among the latter are claimed to be certain branches of the building trades, and in a general way railway wages. While it is considered that much adjustment is still to take place in the directions mentioned, there is reason to think that even the labor unions are recognizing the inevitable trend of events and will offer less resistance and more co-operation than heretofore, and thus aid, rather than block, progress in the direction of resumption of industry and the increase of employment. Throughout industrial circles, the feeling is that the readjustment is now within reasonable distance of being accomplished, at least to the extent of justifying belief in a gradual resumption of manufacturing activities in 1922.

In regard to unemployment in Toronto, it has been announced that relief work during the coming winter will be in charge of the Social Service Branch of the Department of Health. It is intended that no money doles whatever will be given out, and any expenditure made by the city will be through works to be started. This decision has also been reached by the Federal and Provincial Governments.

Membership Work

An important question concerns membership. Ontario Division thinks that the special feature for the ensuing year should be tours of industrial centres by parties of manufacturers, accompanied by members of the permanent staff to be followed up later

by membership canvassing. The strength of the Association lies in the fact that it represents the collective views of business men in many diverse industries, and while the work of local branches is of the highest value, the consolidation of the National Association must be maintained and extended.

New Machinery Hall

A fully equipped Machinery Hall for the Toronto Exhibition to cost \$350,000 is planned by exhibitors. A section is to be devoted to electrical appliances, and space may also be available for phonograph and furniture manufacturers. About 50,000 sq. ft. of exhibitory space is planned for.

J. P. Murray, who has taken a keen interest in the matter, at a meeting of Executives held at the Exhibition, urged a greater co-operation of all branches of the machinery industry, together with a launching of an extensive campaign for "Produced-in-Canada" machinery.

T. A. Hollinrake, ex-chairman of Toronto Branch, was appointed chairman of a committee to carry out arrangements, J. M. McIntosh, Secretary, Trade Sections Department, being appointed the Secretary of the Committee.

Made-in-Canada Campaign

As indicated elsewhere in this issue, the Association is following up the Made-in-Canada Campaign this Fall with energy. In no part of Canada are the results of this activity more noticeable than in Ontario, particularly in view of the fact that the number of exhibitions and fall fairs in this Province largely exceeds the total in all the other provinces combined.

Nearly a million and a quarter people clicked through the turnstiles at the Canadian National Exhibition in Toronto this year,—and it is safe to assume that no observant visitor could miss the black and white cards which urge the buying of Canadian products. The London and Ottawa Fairs were similarly placarded, and the attendance at these points averages over one hundred thousand people yearly in each instance. In addition to this, the Publicity Department hopes to cover a greater part of the 316 Fall Fairs which are being held throughout the Province during the next six weeks.

From this it will be seen that the Provincial Made-in-Canada mesh has been drawn particularly fine, and that few active Ontarians will escape the plea for the purchase of Canadian-grown, Canadian-bred, or Canadian-made products. Every possible interest point carries the slogan. The market gardener and the fruit grower will find their own products of the soil have been raised into the limelight of this publicity, and the cattle breeder, the bee expert and the dairyman will divide the honors for second place. The black and white cards mark the choicest needle-work of the Province, the handicraft of our partially disabled soldiers, our fire-engines, our Canadian-made railway trains, and even such artistic efforts as the fret-saw reproduction of the Lord's Prayer at the Oakville Fair.

Actual enquiry and investigation on the part of the Association's officials has proved beyond doubt the fact that the campaign is

having marked effect and is meeting with public sympathy. The mighty shout of approval from the vast crowd at the Toronto Exhibition on the closing night, when a reproduction of the large card was thrown on the screen at the grand stand, would, in itself, be a worthy sponsor for this assertion.

Death of Hon. L. H. Clarke

At a meeting of the Toronto Branch Executive held on September 15th, the members of the Executive gave expression to the great sorrow, with which they had learned of the death of His Honour, Lionel H. Clarke, Lieutenant Governor of Ontario, a member of the Branch long known as an able, wise and patriotic Canadian of sterling character with a geniality and kindness of heart rarely equalled. The Toronto Branch, in common with the membership as a whole, unite in mourning his loss. In token of their sympathy, a beautiful wreath was forwarded by the Executive to the deceased's residence, and the Secretary was directed to convey the sympathy of the manufacturers to the bereaved family.

Technical School Scholarships

The Toronto Branch Executive, pursuant to recommendation of its Educational Committee, is applying to the manufacturers of Toronto for a minimum of 53 scholarships of \$25 each to be awarded by competition to the day pupils at the Central Technical School.

In his report of last year's results, the Principal, Dr. McKay, states that from both regular and special day classes in the Central Technical School, there is a constant stream of young people entering industrial life, with an ever-increasing equipment of mental culture and practical efficiency, and that the scholarships given by the manufacturers are a strong factor in helping the school to hold students until they have secured an adequate preparation for life. As far as possible, these special classes are industrial, that is, they are designed to give definite practical instruction in the closely-related industries.

Education is the most important question of Canada's pre-war policies. Other nations have recognized that and they are moving forward accordingly, so that Canada must fall into line. Education is the creation of national wealth, which was demonstrated by the Washington Bureau which made a study of conditions and found that in the centres where there is the highest stage of intelligence, the national wealth has been developed to the greatest degree.

Any manufacturer who has a desire to help in this good work, should communicate with the Secretary of Toronto Branch.

Appointment of Lieut.-Col. H. Cockshutt as Lieut.-Governor of Ontario.

The Toronto Branch Executive received with much pleasure announcement of the appointment of Lieut.-Col. Harry Cockshutt of Brantford, a former President of the Association, to the distinguished position of Lieutenant-Governor of Ontario. The Secretary was directed to convey to His Honour an expression of the good will of the Branch.

Picture Houses

A. T. Thom of the Ontario Wind, Engine and Pump Co., Limited, Toronto, was unanimously appointed to represent the Toronto Branch, along with the representatives of other organizations to report on the effect of current films and stage plays, appearing in local picture houses in the city.

Activities of the Month in Prairie Division

Headquarters of Division, 408 Avenue Block, Portage Avenue, Winnipeg

Chairman.....W. G. Fraser, Beaver Soap Co., Ltd., Winnipeg.
Vice-Chairman.....J. W. Ackland, J. D. Ackland & Sons, Winnipeg.
Secretary.....G. E. Carpenter.

DURING the latter half of August and the beginning of September there was a general and marked improvement in business throughout Manitoba, Saskatchewan and Alberta. It is expected that this condition will be maintained into the new year.

Membership

Since the beginning of the Association's fiscal year, 47 new members have been added to the membership roll of the prairie division, making the present membership in the Province of Manitoba 607, as against less than 200 when the present Division was organized in 1:15—a growth of over 200% in 6 years.

British Empire Producers

During August and September the Executive Committee had the pleasure of conferences with Mr. Ben. H. Morgan, who was visiting Canada as chairman of the Executive Council of the British Empire Producers' Association for the purpose of increasing trade between different parts of the Empire and interesting British capital in starting factories in Canada and the other Dominions.

The members of the Winnipeg Branch listened with great interest to a speech which Mr. Morgan made at a luncheon at which he was the guest of honor at which he explained the objects and activities of the organization which he represented and the services it had rendered Canada in the past.

As a result of Mr. Morgan's visit it is expected that several factories will be located in the Prairie Provinces within the next year. Mr. Morgan is enthusiastic over Canada's opportunity to secure a share of the British market for chilled meat. He points out that the cost of transportation as meat would be less than as live stock, and that Canada is easily 8 days closer to the British market than the Argentine which now supplies the bulk of the British market.

Made-in-France Train

The train of French goods on exhibition touring Canada reached Winnipeg, September 13th, and remained over the 14th and 15th. Count D'Arnaud, representing the French Government, and his associates were welcomed to the Province of Manitoba and city of Winnipeg by His Honor Lt.-Ga. Sir Jas. Aikins and Mayors Ed. Power respectively.

Great interest was displayed in this effort of the French Government to increase trade with Canada, numerous enquiries being made of the Winnipeg office prior to the arrival of the train with respect thereto. When the train did reach Winnipeg it was visited by thousands. The arrangement whereby the Association furnished members with tickets of admission to the train each morning, when it was opened for the inspection of business men only, was greatly appreciated by them.

The Winnipeg Branch of the C.M.A. arranged with the credit wear, retail merchants, sales managers and members of the Board of Trade to jointly entertain the visitors at luncheon on September 15th, at the St. Charles Hotel. The Lieutenant-Governor of the Province, Sir Jas. Aikins, presided. The officials of the various organizations including W. Gordon Fraser, chairman of the Prairie Division of the C.M.A. welcomed Count D'Arnaud and his party and the later explained the object of the exhibition and expressed his appreciation of the hearty welcome and many courtesies that had been extended to the party since its arrival in Canada.

Unemployment in Manitoba

On September 7th the Employment Service Council of Manitoba reported that conditions of employment were nearer normal than they had been for a year past. At the present time the railways are short 1000 men for track work at 35c an hour for a ten-hour day and the Employment Service can place another 500 men on farms at \$4.00 a day.

However, it is expected that there will be the usual reasonable unemployment situation in Manitoba this winter, commencing in about six weeks' time when building operations will be over for the most part and farm work will be very materially reduced for the winter months. It was to meet this situation that the Government of Manitoba called a conference of representatives of the municipalities in the Province, representatives of the Employment Service and others at Winnipeg on September 15th for the purpose of taking steps to create as much work as possible in the province this winter.

Work on the Great Falls Power Plant by the Manitoba Power Company will give employment for from one thousand to twenty-five hundred men this winter and it is expected the Lethbridge Irrigation Scheme will furnish work for several hundred men.

Ten Million Dollar Power Plant

Upon his return to Winnipeg on September 3rd, A. W. McLimont, Vice-President of the Winnipeg Electric Railway Company, announced that satisfactory arrangements had been made for financing a new power development by the Manitoba Power Company of which Sir Augustus Nanton is President, and A. W. McLimont is Vice-President. The location is at Great Falls on the Winnipeg River, 63 miles from Winnipeg where it is proposed to develop 168,000 horse power, the work to cost \$10,000,000. Mr. McLimont will be in charge of the management of construction and operation. F. H. Martin is designing engineer for the Great Falls Plant

and F. J. Hirst of New York is consulting engineer.

The new power development means to Winnipeg and Manitoba:—

Employment of from 1000 to 2,500 persons.
Average monthly wage bill of \$125,000.

Purchase through local houses of equipment and tools totalling over \$750,000.

Purchase of 160,000 barrels of cement from local plants.

Purchase of 2,000 tons of structural steel from local shops.

Purchase of 10,000 bricks from local yards.

Purchase of 2,000,000 feet of lumber from local yards.

Erection of a terminal station in Winnipeg at a cost of more than \$500,000.

Bringing to Winnipeg and vicinity new industries, when power is available, employing at least 2,000 men.

Shoppers' Exposition

Arrangements for the Shoppers' Exposition to be held in the Board of Trade Building from September 26th to October 1st are going forward steadily and arrangements for the Fair Parade are almost completed, the object being to feature in the trade the increased purchasing power of the dollar.

Gorgeous floats, demonstrating the rising power of the dollar will be the leading feature.

It is proposed that one of the floats be filled with grouchy pessimists who are being drawn to the "Scrap Heap" by a happy group of optimists.

Some cows on another float will be milked while the parade is in progress and a banner will inform the public that the West can feed the cows but the East is doing the milking.

A large silver dollar and a wheel will be rolled through the streets to represent the turning dollar and the wheel of progress.

A wedding will be performed on one float; "Sell Your Hammer and Buy a Horn" will be the feature of another, while a third will show a balance scale with the "Balance" heavily on the side of 1921 purchasing power.

Preceding the Exposition, advertisements are being inserted in the local papers, to educate the public to the fact that the dollar has a larger purchasing power now than a year ago.

Uniformity of Commercial Law

By H. MACDONALD

Legal Secretary, Canadian Manufacturers' Association

The fourth Annual Convention of the Commissioners on Uniformity of Legislation in Canada was held in Ottawa, September 6th-8th, 1921, its recommendations being reported to the Canadian Bar Association, in session at the same time.

A work of considerable public importance is being done by the conference of Commissioners on "Uniformity of Legislation in Canada", which is being increasingly appreciated. There are many subjects, upon which the various provinces are legislating from time to time, and it frequently happens that just because the different legislatures act independently of each other, there is a great diversity of legislation. This diversity of business law is embarrassing and harmful from the point of view of manufacturers and others who carry on business in the different parts of the Dominion.

The obvious benefits resulting from the meeting of the State Commissioners of the United States suggested the advisability of similar action being taken in Canada, and on the recommendation of the Council of the Canadian Bar Association, in 1918, several of the provinces passed statutes providing for the appointment of Commissioners to attend a conference of commissioners from the

different provinces for the purpose of promoting uniformity of legislation in the provinces. The result was the formation of the conference of Commissioners of Uniformity of Legislation in Canada.

At the recent meetings of the conference, one of the most important subjects under consideration was that of Fire Insurance, with special reference to the form of statutory conditions to be inserted in fire insurance policies. Another subject of special importance was that of life insurance. A new draft act has been prepared for the Ontario Government and this draft was discussed and revised by the Conference of Commissioners. Other subjects before the conference were "Conditional Sales", "Warehousemen's Liens", "Company Law", "Devolution of Estates of Intestates", "Enforcement of Foreign Judgments," and the "Protection and Property Rights of Married Women."

We were able to enlist the special interest of the Commission on Uniformity in the efforts now being made for a conference of representatives of the Dominion and Provincial Governments with a view to arriving at some satisfactory arrangement for a prominent and equitable basis of taxation to be adopted by all the provinces.

News from British Columbia Division

Headquarters of Division, 705 Board of Trade Building, Vancouver

Chairman.....J. B. Thompson, Jas. Thompson & Sons, Ltd., Vancouver.
Vice-Chairman.....R. W. Mayhew, Sidney Roofing & Paper Co., Ltd., Vancouver.
Secretary.....H. Dalton.

SHARKS in the waters along the British Columbia coast are to be turned into leather, liver oil, jewelry, fertilizer and, finally, dollars, according to plans of a Victoria company now being organized. A private company is about to launch the new coast industry on a large scale. The reducing plant is to be situated on Barkley Sound.

Shark fishing, like whaling, is to be carried on along the West Coast of Vancouver Island, where examination has shown that the huge Basking Sharks, some of them weighing 2,000 pounds, abound in large schools.

Fishing for the big sharks will be carried on after the fashion of whaling with harpoons shot from guns.

Livers of some of the big basking sharks, which are 60 to 65 per cent. oil, yield up to 30 gallons of the finest shark oil. It is used for oiling delicate mechanisms and in medicine. Livers of the smaller mud sharks found in the waters between the Island and the Mainland and in the Gulf of Georgia, yield up to 10 gallons of oil.

The fins are almost pure gelatine. They are cured and sold to Chinese for around \$3 each. The Chinese use them in the preparation of delicacies for their tables. Membranes and intestines are turned into gloves, glue and gut. Blood and flesh are turned into chicken food and fertilizers. The head is a solid mass of cartilage glue.

The best paying part of the fish is the skin, which has the toughness of vulcanized rubber. The outer surface is rough like sandpaper. This rough surface is taken off by an acid treatment. The skin is then tanned. The resulting leather is said to be soft, pliable, durable and waterproof. Skillfully dressed, in addition to boots and shoes, this new leather is said to work beautifully into belts, handbags, card-cases, furniture coverings and gloves.

New Chemical Plant

The Acetate Products Company have recently acquired the site of the old Liverpool Cannery at New Westminster, B.C., and are now installing retorts, etc., for the production of wood alcohol, charcoal, acetate of lime and wood tar, using as their raw material the native alder which is found in great profusion in certain sections of the lower British Columbia mainland.

The new plant will treat approximately 10½ cords of alder daily, from which will be produced 100 gallons of wood alcohol, 8400 pounds of charcoal and 1 ton of acetate of lime.

A ready market for the products of this company is already assured,—numerous enquiries, both domestic and export, already indicating that the initial output of the Acetate Products Company will be readily absorbed.

New Brick Company

The property of the B. C. Silica, Sand and Lime Brick Company at Steveston has been taken over by an Eastern company and over-hauled for the production of building brick to cater to the demand for this commodity in the B. C. lower mainland.

Mining Notes

A company known as the Calcium Carbonate Company, Limited, with a capital stock of \$50,000, has been formed to produce washed calcium carbonate from the deposits on the Fred Harrison property in the Kane Valley, near Merritt. The property

has been reported on, and found satisfactory in quality and quantity. It is understood the finishing mill is to be established at Merritt.

Reconstruction of Concentrator

Work on the reconstruction of the concentrator and mill at the Britannia Beach Copper Mine near Vancouver, is expected to commence at an early date. This work will involve an expenditure of approximately \$1,000,000 and will require twelve months to complete. This work is expected to give employment to a large number of men.

Silo Manufacturing in B. C.

A new industry for B.C. and with an apparently large field for expansion, was recently created through the purchase by the Hoard Company at Victoria of the patent rights for a new type of inter-locking farm silo,—manufacture of this silo having already commenced at the plant of the Bainbridge Lumber Company on Vancouver Island.

Negotiations have been completed, it is reported, between the Hoard Company and the Brackman-Ker Milling Company, the latter to act as sales agents in British Columbia. The Brackman-Ker Company have extensive connections throughout the province and it is expected that through this medium the silo will have a general distribution in British Columbia.

The Hoard Company also expect to do an export business with this silo through the

fact that B. C. fir has been found the most suitable wood for the production of this type of farm equipment,—shipments having already been made, it is reported, to California and enquiries have been received from other foreign countries for the company's product.

New Match Factory

Actual production of match blocks for the eastern trade has commenced in the big match block factory recently completed by the W. W. Powell Company, Ltd., at Nelson, B.C., and the first cars of product have been billed out for the east.

Nelson's newest industry employs about 25 hands. The company controls the white pine output of the Nakusp Lumber Company, and of Lingle & Johnson at Slokan City, and has yards at both these points. At present it is using about a car of product a day and is turning out match blocks at the rate of three cars a week.

Match blocks are the raw materials from which match manufacturers make their splints, and the shipments already billed out are to eastern match manufacturers on both sides of the international boundary line.

New Brewery at Kamloops

The Rainier Brewing Company, formerly of Seattle and San Francisco, have recently completed and are now operating a large brewery at Kamloops, B.C., which represents an outlay of approximately \$250,000. The northern portion of the Okanagan Valley is a good hop growing district and with the excellent water supply available at Kamloops, the success of the company is turning out as excellent a product as was formerly produced in the American Pacific Coast plants should be assured.

Trade of India is Improving

IN an article in the first number of *The Indian Importer and Exporter* on "India as a Market," Mr. Thomas Ainscough, His Majesty's Senior Trade Commissioner in India and Ceylon, says the export trade from the United Kingdom to India may be roughly divided into three main divisions. Firstly, the textile trades, which cover between 50 per cent and 60 per cent. of the total British shipments to that country. Secondly, the valuable shipments of metals, machinery railway stores and plant, which roughly account for a further 20 per cent. Finally, the balance, consisting of hardware of all kinds, chemicals, provisions, apparel and the thousand and one miscellaneous articles in demand throughout the bazaars of India, the aggregate value of which, at a conservative estimate, must amount to well over £30,000,000 per annum at current prices. The great textile, metal and engineering trades are, on the whole, admirably organized. The miscellaneous import trade, however, is not co-ordinated for its own protection, and it is in this miscellaneous section of our commerce that foreign competition is becoming most insistent, and where the most careful study of the market is called for on the part of British manufacturers if they hope to retain the position they have gained by years of effort.

The import trade at the moment is passing through one of the most serious crises which it has ever been called upon to meet. It is a most noteworthy fact that the difficulties are greatest in those centres such as Delhi and Bombay, where the most liberal financial and trading facilities have been granted by British exporters to the Indian importers and bazaar dealers. Liabilities are being repudiated and drafts dishonoured on a scale hitherto unknown and with a callousness which shows an utter disregard in the minds of a great many Indian importers and dealers for the sanctity of a contract. "After giving much study to

the question," says Mr. Ainscough, "I am convinced that, if carefully conducted on sound lines and with responsible Indian firms, the direct trade is a reasonably safe one, particularly in those cases where the home shipper has a resident representative in India to safeguard his interests."

"It would appear," Mr. Ainscough adds, "that we are gradually emerging from the depths of the present crisis, and it is to be hoped that, before the year is out Indian trade will once again resume the path of steady and rapid progress which has been the normal conditions for the past few years. The prospects for the future are brighter in India than in any other Eastern country. The present stagnation is due to abnormal world conditions which are the inevitable aftermath of war, and are essentially of a temporary nature."

Parliamentary Legislation

According to practice, a digest of last years' legislation affecting manufacturing, introduced during the past year in the Dominion Parliament and Provincial Legislatures will presently be furnished to the entire membership. Each bill brought forward was carefully considered and where manufacturers were concerned, proper steps were taken in the case of Dominion legislation through our Ottawa office, and in the case of Provincial legislation through the Divisional Secretaries, under the direction of the Legal Department to safeguard their interests. In such cases, briefs were prepared pointing out the probable effect of objectionable measures and where it was thought advisable, deputations waited on the Legislatures to express their views. There has been ample evidence of the appreciation of these services by our membership and they will be continued.

News Relating to Export Trade

Published by Arrangement with
Canadian National Export Club

THE report that international deliberations on the subject of stabilization of the foreign exchange may possibly be held, concurrently with the Washington Conference on disarmament, has naturally been of some interest to those engaged in foreign trade, says the Monthly Bulletin of the Royal Bank of Canada. The violent exchange fluctuations of the past two years have been a great impediment to free commercial intercourse.

It is extremely problematical what moves towards stabilization will or can be made. The method which was followed during the war by the English, French and Italian Governments, was to "peg" their exchanges in New York. By selling their American securities and by arranging credits in the United States, they supplied themselves with the necessary dollar exchange. After the entry of the United States into the war, United States Government credits also were available. The British Government fixed their exchange at \$4.76 to the pound by instructing their agents in New York to purchase all offerings of sterling at that rate. But to stabilize exchange by any such method as this, enormous financial resources are required; and at the present moment it is practically certain that they could not be arranged for in the United States.

Extending the Water and Sewer Systems of Buenos Aires.

The President of the Argentine Republic has sanctioned a decree authorizing a further increase of 4,500,000 pesos in the budget for sanitary works for the city of Buenos Aires during the current year. The money will be used in extending the radius of the water and sewer systems and will call for the purchase of pipes and fittings. The work is under the direction of the Director de Obras Sanitarias de la Nacion, Buenos Aires.

Revised Estimate for British Export Credits

The revised estimate for advances or guaranties in respect to exports of goods wholly or partly produced or manufactured in the United Kingdom for the fiscal year ending March 31, 1922, is £5,000,000, as compared with £2,000,000, for the fiscal year ended March 31, 1921, representing an increase of £3,000,000.

The revised estimate comprises provision for advances to British exporters of the United Kingdom on goods wholly or partly produced or manufactured in the United Kingdom shipped to certain countries in Europe, and provision for guaranties to exporters and banks in the United Kingdom in respect to exports of goods wholly or partly produced or manufactured in the United Kingdom and shipped to any part of the British Empire or to certain countries in Europe.

German Competition in South America

A cable report from South America states that the quality of German goods entering the market is unsatisfactory and inferior to what it was before the war. The terms of sale generally require cash with orders, and delivery is not guaranteed, although freight rates are lower. It has been reported that they have failed to make deliveries on two Government contracts for steel and cars. Imports of German goods are small this month but the low prices offered have a discouraging effect on competition. The Germans are selling specialties in this market, such as paper, toys, hardware, machinery and house-

hold utensils, but they have sold little dyes or cutlery as yet.

Market in Switzerland for Electric Appliances

A correspondent writes that there is a trade to be had in Switzerland to-day in selling electrically-driven household appliances, especially washing machines, as the supply of electric energy, furnished by the steady development of Switzerland's vast resources in water-power makes the use of such appliances enormously cheap. There are scarcely any electric laundry machines manufactured in Switzerland, where from the smallest hand-power washer for all household purposes up to the large electrically-driven machinery suitable for laundries and public institutions would find a demand. Manufacturers of electric washing machinery might bear in mind that same should be arranged for direct current as well as 1-3 phase alternating current of 1-500 volts.

Situation in the United Kingdom

The United Kingdom, has apparently emerged from the most difficult industrial struggle ever experienced by that nation, with courage unshaken and with the firm determination, now that coal is once more available, to renew as keenly as ever the task of restoring her shrunken overseas commerce. The disastrous effect of the coal strike on her foreign trade is disclosed in the figures of her exports for May and June, 1921, which were £50,320,254 and £45,235,002, respectively, as compared with £102,711,213 for January and £76,226,034 for February of this year.

British Chamber of Commerce in Mexico

A British Chamber of Commerce has been established in Mexico City. Its chief object is to encourage trade between the British Empire and Mexico. The Chamber is at the disposal of all British firms who desire information as to business in Mexico, such as assisting firms in the appointment of suitable agents, acting as arbitrator in cases of dispute, and adjusting Customs and Transportation claims, etc. Members of the Chamber will receive free a monthly bulletin which will deal with Mexican trade conditions. The annual fee is \$100.00 for active members and \$50 for associate members.

Don'ts to Exporters

Don't ask your local agent to bear everything. Carry your own load.

Don't substitute before consulting with your agent.

Don't promise, unless you are able to perform.

Don't alter shipping instructions. Follow buyers' orders.

Don't ask your agent to pay all the propaganda. Remember he has to live as well as yourself.

Don't expect wonders at the beginning; recall that Rome was not built in a day.

Don't forget that to introduce your merchandise costs money and time; are you paying your share?

Don't forget that it is bad policy to change horses when crossing the stream; give your Representative sufficient time to develop trade.

Don't excuse yourself by saying that you have always done it in this way. Adhere to instructions.

Don't forget that the other fellow has merchandise just as good as yours. Keep your prices in line.

Don't forget to send your mail in duplicate; letters go astray now and then.

Don't sit and wait for business to come to you, for it won't. The magnet is intensive propaganda, stimulated with a little capital expenditure.

Toronto Export Club

The first meeting of the Toronto Export Club since June was held on September 13, and a good number of members heard three informative addresses on matter relating to the objects of the club. The first speaker, F. L. Freudemann, Sterling Rubber Company, Limited, Guelph, read a paper on the use of the parcel post in export trade. In his business, the manufacture of seamless rubber goods, he had found the advantages of the parcel post so great that about half their deliveries within Canada and every foreign shipment within the past four or five years had been made by this means. He believed that other manufacturers who had frequent shipments of light goods could also utilize the parcel post's services.

Mr. Freudemann explained in some detail his company's method of packing shipments for parcel post and mentioned the hearty co-operation they had received from the Post Office. He suggested that parcel post deliveries should be made by all Canadian Government Merchants Marine vessels as that would reduce delays and enable Canadian exporters to compete more efficiently with those of other countries. He also advocated the establishment of a C.O.D. collection system, such as is now in force between Great Britain and the United States.

W. E. Lemon, Postmaster of Toronto, gave the club an inside view of the Canadian postal system. He explained the routing of domestic and foreign mails and made some suggestions about ways in which manufacturers could co-operate with the Post Office to their mutual advantage. He also dealt with the new schedule of postal rates that comes into effect on October 1st.

Major Hugh Chisholm who has recently returned from Cuba, Central America, Mexico and the West Indies made a few remarks on the possibilities for trade there. Panama, he thought, deserved the consideration of Canadian exporters, for it is rapidly becoming a distributing centre for Central America, and parts of South America and Mexico. He was of the opinion that there was a good field for trade in Mexico, but Cuba was not a good market just now as the slump in sugar and the United States preference made trade too difficult.

Export Club for Montreal

Plans for the organization of an Export Club in Montreal were laid at a meeting of the Executive committee of the Montreal Branch, C.M.A., on September 13. After discussion of the objects of such a club it was decided to go ahead with the project, and an organizing committee was appointed, composed of B. W. Coghill, A. D. Huff, J. A. Lapraes, F. R. Whittalls, S. E. Gettus, W. A. Twohey and J. A. Ashcroft.

The functions of the club, it was stated at the meeting, would be to promote friendly relations between members; to circulate reliable information regarding the export trade; to co-operate with the Department of Trade and Commerce, the Canadian Manufacturers' Association, and other organizations having similar objects for the advancement of export trade for the Dominion, and to assist in the formation of other export clubs in Canada.

The new club will be known as the Montreal District Export Club, the membership to include the whole of the Montreal district including Ottawa and certain parts of eastern Ontario. An organization meeting will be called later, when definite action will be taken, including the election of officers.

Transportation Department

Synopsis of Recent Decision of Board of Railway Commissioners and Other Transportation Matters of Interest

Order 31379, dated 13th of August, 1921, file 28721.2.

This order and the memorandum which forms part thereof deals with an application of various organizations, including C. M. A., requesting suspension of the operation of items in Canadian Freight Association Tariff C.R.C. No. 45, Ransom's No. 14, effective on May 25th, 1920, which provides increased charges for the weighing of carload freight. The Board in dismissing this application states that they could see no reason why the car should be hauled free of local switching charge on mere suspicion, the applicant, where proper evidence is submitted, being amply safeguarded by Section 18, Sections 14 to 17 and Rule 7, Section E of the tariff.

Order 31400, August 17th, 1921, file 26848.6.

This order deals with an application of the Department of Agriculture against the rate on fruits and vegetables from points on the T.H. & B. Railway to Hamilton for shipment beyond, which is charged by the American Railway Express Company. The Board orders that the American Railway Express Company be required to publish proportional rate of 24c per 100 pounds on fruits and vegetables from shipping points on the T. H. & B. applicable to shipments destined beyond same to become effective on August 27th, 1921.

Order 31406, August 6th, 1921, file 19367.-69.1.

This order carries out requirements contained in judgment of the Board which was referred to in last month's issue. The order requires that Item 12, page 45, Supplement No. 15 and Item 16, page 45, Supplement No. 15 be corrected to read as follows:—

L.C.L. C.L.

Tires, Rubber:	
Pneumatic (See Note 1)	
In wrapped bales of wrapped bundles (See note 2).....	1½
In metal strapped and sealed bundles (See note 3).....	1
In boxes or crates.....	1
Loose or in packages, C. L. minimum weight 20,000 lbs. (See Note 4).....	3
Tire Tubes:	
In boxes or crates.....	1
In packages named; C. L. minimum weight 20,000 lbs.	3

Note 1.—Ratings apply also on tires containing inner tubes.

Note 2.—Wrapping must be of burlap; or of paper and burlap; or of waterproof paper reinforced with a cotton cloth of not less than 40x40 threads to the inch, the combined wrapping materials having a resistance of not less than 60 lbs. to the square inch, Mullen Test; or of two thicknesses of waterproof paper fastened together with a waterproof composition and containing parallel strands of yarn not more than ½ inch apart, the combined wrapping material having a resistance of not less than 60 lbs. to the square inch, Mullen Test; or of a waterproof material produced by uniting with a waterproof composition two thicknesses of paper, each weighing not less than 60 lbs. to a ream (480 sheets 24 inches by 36 inches), the combined wrapping material having a resistance of not less than 100 lbs. to the square inch, Mullen Test.

Note 3.—Wrapped to comply with Note 2 and strapped with not less than 2 metal straps, not less than ¾ of an inch in width and not

less than .015 of an inch in thickness, and having a tensile strength of not less than 500 lbs. and sealed with metal seals.

Note 4.—Tires when shipped loose must be loaded and unloaded by owners.

It is further ordered that changes mentioned be made effective forthwith in Supplement No. 17 to Canadian Freight Classification No. 16.

Order 31407, August 22nd, 1921, file 31314.

This order deals with complaint of Atlantic Sugar Refineries Limited, against cancellation by the C.P.R. of rates on sugar from St. John, N.B. to Levis, Montreal and Quebec. The order requires that Item 363-B as shown in Supplement 19 to C.P.R. Tariff C.R.C. E-3808, effective September 6th, 1921 be suspended until further orders following hearing of the complaint at the first September traffic sittings.

This question was subsequently set down for hearing before the Board at Ottawa on September 20, 1921.

Judgment July 22nd, 1921, Carvell and Boyce, file No. 26751.16. Reference Volume 11 August 15th, 1921, No. 10, Page 210, B.R.C. Judgments, Orders, etc.

The judgment dismisses an application of the Eugene F. Phillips Electrical Works, Limited, requesting an order requiring the C.P.R. to lease to them its siding on Marmier Street in the City of Montreal. This decision, however, is interesting from the standpoint of the Board's views regarding the sections of the Railway Act which deal with such matters and should be of interest to traffic men and others who have these problems to consider.

Demurrage Charges

It will probably be remembered that a short time ago a committee from the National Traffic League in the United States conferred with a committee from the American Railway Association regarding the question of establishing a flat demurrage rate in lieu of the present sliding scale. The figure which was agreed upon is \$3.00 per car per day. Owing to the fact that considerable objection was raised by members of the National Industrial Traffic League to this arrangement that body has taken a mail vote on the following question:—

"Bearing in mind our terms to the Interstate Commerce Commission, do you favor an immediate effort to put into effect a flat \$3.00 demurrage rate to apply under all conditions, as approved by the League, or do you favor marking time on this question until conditions change to that extent where carriers force action?"

The result of this vote has not as yet been received, but it is interesting to note that one of the members of the League recently gave an interview in which he attacked the establishment of a \$3.00 per car per day charge, his view being that the present sliding scale was far better, securing the desired results while not penalizing too greatly against those who from misfortunes beyond their control could not unload their cars within the free time.

In this connection it might be well to again refer to our application filed with the Board of Railway Commissioners and concurred in by various other organizations requesting a reduction in the present demurrage charges applicable in Canada. At the hearing in connection with this question representatives

for the various organizations agreed that they would prefer a sliding scale rather than a flat rate, the view being that there should be a reduction in the charge to \$1.00 for the first three days following free time, this to be increased \$1.00 per day until \$5.00 per day was reached, which would be the maximum. This case is still before our Board of Railway Commissioners for a decision.

Export Rates

The American railways in the territory known as central freight and trunk line secured permission on August 25th, to reduce on short notice rates from points in these territories to the Atlantic seaboard by 25 per cent. these rates to remain in effect until September 1st, 1922. This is a new procedure for American railways on business for export originating in the territory referred to and destined to Atlantic ports as formerly the export rates were the same in practically every case as those applicable to shipments for domestic consumption in these ports. We understand that the reduction will mean on manufactured iron and steel articles that the rate from Chicago to New York will be reduced from 63c to 47½c per 100 pounds and from Pittsburgh to the same port from 38c to 28½c per 100 pounds, while the rates on pig iron from Chicago will be reduced from \$10.08 to \$7.60 per ton and from Pittsburgh from \$6.02 to \$4.60 per ton.

Ocean Rates

The latest report regarding the ocean freight market indicates a somewhat firmer tone, although in the charter market little change is indicated. Montreal would appear to be doing quite a large business in this market on grain. In fact from what we are able to learn the largest proportion of the Atlantic business is being done at Montreal. The elevators are working at full capacity and it is stated that contracts have been made up to December 1st. Recent fixtures from Montreal closed on the basis of 22c per 100 pounds Canadian funds to the Antwerp-Hamburg range with \$5.00 to the United Kingdom, September-October loading. Considerable business is being done on the Pacific Coast with the Orient and while some reductions were made in the rates early in August, the great volume of traffic handled is causing a slight stiffening of these rates.

Recently the rate on logs from Portland and the Columbia River was raised from \$12.50 to \$17.50 per thousand feet board measure, although lumber remains at \$12.50.

Car Supply

With the movement of grain, car surplus has commenced to decline and in some local cases in the United States shortages of certain equipment exist. There is still a considerable number of idle cars on the lines of the various carriers in the United States and Canada. Of the total idle cars, however, there is a very large percentage represented by bad order cars. In fact the number of these cars has been on the increase which to some extent accounts for the reduction in the surplus. For example for the period ending July 31st, the total idle cars were 526,177 on U.S. lines. Of this number 321,781 were in good order while 204,396 were in need of repair. For the period ending August 8th the average daily surplus was 297,784 and those in need of repair 215,256, making a total idle cars of 513,040. For the period ending August 15th the surplus was 284,338 and those in need of repair 215,156, total idle cars of 299,594. For the period ending August 23rd the surplus had declined to 221,375, making a total idle cars of 491,399.

On Canadian lines the situation for the period ending August 15th, was as follows:

Surplus cars in good order.....	36,130
Actual cars in bad order.....	15,172

It may be explained here that the bad order cars stated for U.S. lines are those in excess of 7 per cent of the total cars. This 7 per cent, is used by the American Railway Association to represent what they claim to be normal bad order car situation under present conditions. If we use the same figure here our bad order cars would be 136 as 7 per cent of total cars on Canadian lines (214,797) is 15,036.

For the period ending August 1st the figures were as follows:—

Surplus cars in good order.....	35,077
Actual cars in bad order.....	17,400
7 per cent allowance.....	14,909
Excess bad order cars for this allowance	2,491
Total cars on Canadian lines.....	212,985

Car Supply

For September 1st the figures on Canadian lines are as follows:—

Surplus.....	28,339
Actual bad order.....	15,263
7% allowance for bad order cars A.R.	
A. basis.....	15,031
Excess bad order over A.R.A. allowance.....	232
Total idle cars.....	28,571
Total cars on line.....	214,735

Personnel of Consolidated Express Companies

The following officials have been named to handle the business of the consolidated Canadian Express Company and Canadian National Express Company.

In building up the organization, President Pullen and Vice-President Muir, have followed the policy of the selection and promotion from the ranks of men of proven ability and experience.

Three general superintendencies have been organized, with large, local administrative authority. The headquarters of these will be in centres of large population, where they may be readily accessible, and where the general superintendents will be in closest possible touch with the operating officials of the railways, who have, in their charge the service of trains which carry the express. The appointments made to date, to become effective September 1st, follow:—

The Headquarters Staff

John Pullen, President; W. C. Muir, Vice-President and General Manager; G. E. Bellerose, Assistant to General Manager; W. C. Webb, General Claim Agent; W. P. Stericker, Assistant General Claim Agent; J. H. Moore, Superintendent of Equipment and Supplies. All of these are to be at Montreal.

Eastern District

F. N. Wiggins, formerly Superintendent of Canadian National Express at Toronto, is to be General Superintendent of the Eastern District, with headquarters at Moncton, N.B.; H. C. Creighton, Claim Agent, with office at St. John, N.B.; H. R. Hauch, Superintendent of the Maritime Division, with office at Moncton, N.B.; C. L. Bowles, Superintendent of the Quebec Division, with office at Quebec city.

Central District

W. E. Norman, who was Superintendent of the Canadian Express Company at Toronto is appointed General Superintendent of the Central District, with headquarters at Toronto; F. Gillespie, Claim Agent, with office at Toronto; A. J. Seaton, Superintendent of the Montreal Division, with office at Montreal;

A. F. Stillman, Assistant Superintendent, with office at Belleville, Ont.; R. H. Jones, Superintendent of the Toronto Division, with office at Toronto; and S. H. Bullett, Assistant Superintendent, with office at North Bay, Ont.; C. J. Bothwell, Superintendent of the London Division, with office at London, Ont.

Western District

C. A. Cunningham, formerly Superintendent of Canadian National Express at Winnipeg, is to be General Superintendent of the Western District, with headquarters at Winnipeg; C. A. Mulligan, Claim agent, with office at Winnipeg; F. Norman, Superintendent, of the Winnipeg Division, with office at Winnipeg; B. A. Latta, Assistant Superintendent, with office at Saskatoon; Z. M. Middleton, Superintendent of the Edmonton

Division, with office at Edmonton; W. C. Cranston, General Agent, with office at Vancouver.

Audit Department.

W. W. Williamson is appointed General Auditor, with office at Montreal, and J. G. Swallow, Assistant General Auditor, with office at Montreal. W. H. Bryce, is to be Manager of the Money Order Department, with office at Montreal, and J. H. Sonne, is to be Assistant Treasurer, with office at Montreal. S. J. Potter, W. LeB. Ross, and C. E. Buckley, Local Treasurers for Canadian National Railways, at Toronto, Winnipeg and Vancouver, respectively, are to act in the same capacity for the Canadian National Express Company. J. A. Hill, is to be Auditor of Revenues, with office at Montreal.

Tariff Department Bulletin

Record of recent Board of Customs Decisions, Departmental Rulings, Excise Tax Rulings and other useful information.

Departmental Rulings

Suction Hose for steam engines and threshers dutiable as rubber hose under tariff item 619, at the rate of 35% under the general tariff.

Rubber straps for men's and boys' belts dutiable under tariff item 612 at the rate of 30% under the general tariff.

Garnet sand, tariff item 295 free of duty.

Wire reinforced asbestos yarn dutiable under tariff item 312 at the rate of 25% under the general tariff.

Motors for vacuum cleaners dutiable under tariff item 453 at the rate of 27½% under the general tariff.

Celluloid sheets dutiable under tariff item 711 at the rate of 17½% under the general tariff.

Drawbacks

Drawback on imported steel sheets used in the manufacture of stampings for automobiles. By Order-in-Council dated August 13th, 1921, the provision for drawback has been continued indefinitely.

Drawback on steel bars used in the manufacture of steel sheets. By Order-in-Council dated August 13th, 1921, the provision for drawback has been continued indefinitely.

Sales Tax Rulings

JOB PRINTERS:—With reference to the note in the August number of INDUSTRIAL CANADA (vide page 78) the Department of Customs and Excise has issued the following ruling respecting the application of the Sales Tax to job printing:—

"Job printers or newspaper publishers who also do job printing may be classed as retailers when selling exclusively, by retail, goods made to the order of each individual customer.

Goods made for stock or sold to customers for resale are held to be subject to the sales tax.

Concerns covered by the first paragraph will not be required to secure sales tax license nor collect sales tax.

This ruling is in effect from May 10, 1921, inclusive."

The Department states that the job printer will be held responsible for the collection of the sales tax in respect of goods made for stock or which are sold to a customer for resale. In view of this it is advisable for job printers to ask their customers, when buying goods for the customer's own use, to furnish a certificate to that effect.

Where sales tax has been collected and paid to the Government in respect of transactions

on or after the 10th of May, and which transactions are exempt under the recent ruling of the Department—as having consisted of goods made to the order of the individual customer, it will be in order for the job printer to apply for a refund of such sales tax through the nearest Collector of Customs and Excise. The Department states that any such application will require to be supported by the written undertaking of the job printer to the effect that if the refund is approved by the Department he will in turn refund to his customers. A list of the customers should be submitted along with the claim, showing their addresses and the amount of tax collected in each case. The Department further states that the job printer will not be required to make any refund to his customers until his claim has been approved by the Department, but refund to the customers is to be made in the event of the claim being allowed by the Department.

FLORISTS and NURSERY STOCK:—The following rulings have been issued by the Department of Customs and Excise as to the application of the sales tax in respect of the foregoing:—

(1) Cut flowers and plants not included in Nursery Stock, when sold by the producer are subject to Sales Tax.

(2) If cut flowers are made into wreaths, or other designs, the tax is collectible at the rate of 3 per cent on the price at which sold by the producer to retailers or users.

(3) Sales of taxable stock by a producer to another producer, or to the retail store of the former, are subject to tax.

(4) If the greenhouse accounts of a producer, who sells to the retail trade and to users, are segregated from his retail business, the sales tax of 3 per cent, is payable on sales to the retail store on the same basis of price as sales made to the regular retail trade.

(5) On sales by producers to retailers, the tax payable to the Crown is 3 per cent. on the net selling price, of which 1½ per cent. at least, must be shown as a separate item on the invoice and collected from the purchaser.

(6) Sales by the producer to the consumer or user, are also taxable at the rate of 3 per cent. on the same basis of price as sales made to the retail trade.

(7) Dealers who import cut flowers or plants and sell under wholesale license are liable to 1½ per cent in addition to the 2½ per cent tax on importation on sales of imported stock.

(8) When a producer sells through a commission house, the latter being employed on straight salary or commission basis only, the tax of 3 per cent is applicable on the sale by such commission house to retail dealers since the commission house is regarded as being in the employ of the producer for purposes of the sales tax.

The foregoing regulations are effective as respects all sales made from the 10th May, 1921, inclusive.

Circular G. 43 is hereby cancelled.

Additional Provincial Institutions Entitled to Exemption From Sales Tax.

The following list of institutions should be added to the list in Appendix D on page 21 of the Association's Excise Tax pamphlet:—

Ontario School for the Deaf, Belleville, Ont.; Provincial Brick & Clay Plant, Mimico, Ont.; Quebec Liquor Commission; Boys Detention Home, Regina, Sask.; Normal School, Calgary Alta.; B. C. Government Liquor Control Board; B. C. Mental Hospital, Essondale, B.C.

Where these institutions purchase goods for their own use and not for resale, the transaction is exempt from sales tax. The exemption being a conditional one it is necessary that the order from the institution have endorsed thereon, or be accompanied by, a certificate to the effect that the goods are for the sole use of the institution and are not for resale.

Newfoundland Tariff Changes

At the last session of the Newfoundland Legislature certain amendments were made to the customs tariff of that country. The principal item of interest in the amendments is a provision for an additional surtax of 25% which applies on all imports, with a few minor exceptions. The Newfoundland tariff of 1905 provided for a surtax of 10%, and the surtax of 25% under the recent legislation is an additional surtax. For example, if the duty levied on a particular importation was \$100, there would be \$10 payable under the 10% surtax of 1905, making a total of \$110. The recent surtax of 25% is based on this amount and would be \$27.50, making a total of duty and surtaxes of \$137.50. The Act provides that this additional surtax shall be effective in respect of imports on and after the 26th of May, 1921.

Newfoundland Special or Dumping Duty

In the recent amendment to the Newfoundland tariff laws provision is made for special or dumping duty where goods are sold for export to Newfoundland at prices which are less than the fair market value of the same articles when sold for home consumption in the country whence exported to Newfoundland. The provision is very similar to the one contained in the Canadian tariff, with the exception that the special duty may amount to 25% in the case of imports into Newfoundland. Under the Canadian legislation the maximum is 15%.

Newfoundland Sales Tax Law

At the recent session of the Newfoundland Legislature an Act was passed to provide for a sales tax of 5% on imports, except in the case of flour where the sales tax is 3%. Provision is also made for a sales tax on domestic sales at a slightly lower rate. The sales tax on imports is payable on the total of the invoice cost of the goods plus freight and plus customs duty. Certain goods are exempt from the sales tax on importation, such as materials imported by manufacturers for use in remanufacture, materials for use in connection with the manufacture and conveyance of pulp, etc.

Full particulars of the recent Newfoundland tariff changes may be obtained from the Tariff Department of the Association.

Impressions of German Industrial Conditions

By R. J. DURLEY

Secretary, Canadian Engineering Standards Association.

THE time which I spent in Germany recently was quite brief, (only five days) and, whilst I traversed the country from Stuttgart to Berlin and from Berlin to Cologne, my impressions are merely those which could be gathered in passing. The object of the visit to Berlin, in which I was accompanied by Dr. Agnew, the Secretary of the American Engineering Standard Committee, was to find out what the Germans had accomplished since 1914 in the field of industrial or engineering standardization. They had, of course, done a good deal before the war especially in connection with electrical work, but in 1917 they commenced activity along many other lines as a war measure and I formed the impression that having, as we know, reached high development in industrial research before the war, they are now making an extensive and organized effort to develop industrial standardization wherever they think any economy will result. The extent to which this movement has the support of German industry is shown by the fact that over 5000 individual firms subscribe to the funds of the Normen Ausschuss de Deutschen Industrie (N.D.I.) or Standards Committee of German Industry. These firms not only contribute in money but the majority give active support by nominating members on various working committees by furnishing information, and by themselves using the resulting standards.

As regards the condition of the country, I saw few signs of disorganization other than that resulting from the low rate of exchange and the high cost of living. In the country districts the farms looked prosperous and the forests well kept and admirably provided with fire lanes. The recent revolution with its fighting seems to have left the machinery of government intact, the old permanent officials as a rule carrying on under the new regime. State railways, for instance, give excellent service. I found the trains punctual and the rolling stock in good condition. Dining and sleeping car service was good and the trains were clean. Railway fares are high and few Germans can afford to travel first class.

In some parts of the country, very few cattle were to be seen. I was told that the number of cows was now some 80 per cent. of the pre-war amount, but that the milk yield was still very small.

In Berlin I found that bread was rationed, no white bread being allowed. Milk was only available for children in limited quantities, and hardly any butter could be obtained. Meat and vegetables, however, seemed to be plentiful, but at prices which seemed very high in German currency, a luncheon of meat, vegetables and cheese at a moderate priced hotel costing from 30 to 40 marks. The people in the streets in Berlin showed but few signs of wealth, the majority wearing old clothes and very few people seemed to be going in for expensive pleasures. I received the impression that rather more than half the people showed signs of under-feeding, more especially in the case of the women and children, but a majority of the population appeared distinctly fat and flourishing.

I had introductions to some of the officials of the Allgemeine Elektrizitaets Gesellschaft (A.E.G.), the German General Electric Company, and received entirely courteous treatment both from them, and from the officials of the N.D.I. I visited two of the largest factories of the A.E.G. in Berlin, at one of which a considerable number of large turbo-generator sets from 10,000 to 20,000 kva were under construction, these being

apparently for Dutch and Spanish orders. At the same works two large marine type Diesel Engines were nearly finished and a quantity of electrically driven mining pumps and other electrical machinery were in progress. I was informed that between three and four thousand men were at work. At another factory of the same company in Berlin, about ten thousand employees were at work, and a very large output of small motors, including street railway motors, was being obtained. If these factories were typical, it would appear that the engineering industries are very fully occupied.

As regards rates of pay, I was informed that young engineers in office work received from 1500 to 2500 marks a month the wages of skilled mechanics being, as far as I could find out, from, say, 60 to 120 marks a day.

I gather that in the engineering trades, the work people are very fully unionized, membership in the unions being also held by the majority of members of the technical and clerical staff. Membership in the union, however, does not seem to lead to any limitation of working hours.

Prices in Berlin struck me as being very high in German currency, although naturally low when translated into our money. A high-grade bicycle in Berlin costs from 900 to 1000 marks. A safety razor, similar to the Gillette but differing somewhat from it in style, was for sale at 25 marks. (This same razor sells in London for 3/6). A taxi from the station to the hotel in Berlin costs 20 marks for about ten minutes ride, and the hotel rate for a double room with bath in a moderately priced hotel of modern construction, was 140 marks, or say 70 marks per person.

I certainly received the impression that everyone was working hard; that they realized the seriousness of the situation, and that if activity and energy can do it, the nation will rapidly get on its feet industrially.

Summary of Mr. Morgan's C.M.A. Address

The paramount importance of the development of inter-Empire trade as a means of assuring not only the maintenance of prosperity throughout Great Britain and the various Dominions, but also complete economic independence for the Empire in times of stress, was strongly emphasized in the address delivered by Mr. Ben H. Morgan, chairman of the Council of the British Empire Producers' Organization of London, Eng., at the luncheon of the Ontario Division of the Canadian Manufacturers' Association on September 7th.

"There is a great searching for political truth in the public mind just now," Mr. Morgan stated, "and there is going to be a still closer search. The Manufacturers' Association need not fear, however, the result of any introspective examination. It is obvious to any student of economics that your future is based on industrial development; that agriculture is the backbone of this country and will be for many years to come, and yet the manufacturing industry cannot be divorced from the agricultural industry.

"I don't fear, therefore, any great consequences from the political situation, for the reason that you are bound to go along very similar lines both in agriculture and manufacturing. It would be obviously foolish for Canada to attempt alone among the nations, to go on without giving attention to the de-

velopment of manufacturing—if you sent your raw materials to be manufactured, paying freight both ways, and three or four intervening profits. If you did that I would say that Canada would not prosper to the full extent that she should.” Similarly, he said, the reverse was true, and the manufacturing industry could not get along without agriculture, which furnished a vast amount of its raw materials. The two were inseparable.

“An industrial policy, however, must be coupled with a trading policy,” he went on. “You must have dependable markets for your goods. Now, in my opinion, the Empire markets are the only really dependable markets for your products. The one solid fact in commerce to all of us to-day is the British Empire. You can’t legislate against monopolies, trusts and combines operating against you in foreign markets, but within the Empire you can more or less control these through legislation of the governments of the respective dominions.”

Turning to the tariff question again he said, “If your policy in this country tends to free trade you will meet with a repetition of the evils we have to deal with in the United Kingdom. There the unseen hand is nearly as potent as it was in 1914 before the war. The Empire Producers’ Organization was formed to combat this alien and unscrupulous competitor. Our organization stands for industrial development in each part of the Empire and to endeavor to make each part as far as possible, self-sustaining in the production of foodstuffs and other commodities.

“The science of free trade and internationalism in commerce is the very antithesis of Empire development and Imperial preference. We recognize that reliance upon the Empire sources of supplies rather than upon the goodwill of foreign countries, is the only sane policy for the British race.”

He commented most favorably on a recent amendment made to the Canadian tariff regulations requiring all imports to be marked with the name of the country of origin and he hoped that a similar measure would be enacted in Great Britain in the near future.

Mr. Morgan stated that his chief purpose in coming to Canada was to make arrangements for a more direct marketing of Canadian goods in the United Kingdom. “So far as Canada’s agricultural products are concerned,” he remarked, “the business in the past has been transacted largely through American houses, American banks and American shipping. There is no reason, if we put our heads together, why we cannot do business direct without allowing some other nation to hold the bag and control our operations on both sides.”

Canada possessed exceptional advantages in this respect in her system of National Railways and the nucleus of a shipping fleet. What was needed, he said was the provision of through rates and through bookings from all points in Canada to the other dominions.”

S. R. Parsons Speaks at Ottawa Exhibition

The chief speaker at the merchants’ and manufacturers’ luncheon given by the Central Canada Exhibition in Ottawa on September 13th was S. R. Parsons, British-American Oil Company, Limited, chairman of the Industrial Relations Committee. In his address he called for co-operation in building up the national prosperity of Canada. He was not in accord with those who would take a national issue like the tariff and make it a class question. “We must stand together,” he said, “if we are to work out our national salvation.” Mr. Parsons concluded his speech with an eloquent appeal to all Canadians to come together in unity of thought, purpose and sentiment.



Stratford Furniture Manufacturers on Tour

Group picture taken during visit to Halifax, showing from left to right,—C. Farquharson, Mrs. F. W. Trebell, E. A. Wilson, (Halifax), W. J. Anderson, F. W. Trebell, Chas. A. Moore, Mrs. Chas. A. Moore, H. W. Studley and Jock Keith (Halifax).

Stratford Men Visit Maritime Provinces

Party of Six Furniture Manufacturers Undertake Interesting Trip, value of which is emphasized.

TWO years ago, a party of Stratford furniture manufacturers undertook a trip to Western Canada, in order to get into personal touch with the furniture trade in that part of the Dominion and become better acquainted with their own country. The trip proved to be so successful that this year a second trip was undertaken, the territory covered being the Maritime Provinces.

The 1921 party included H. W. Strudley, Imperial Rattan Co.; L. J. Salter, McLagan Furniture Co.; F. W. Trebell, Kindel Bed Co.; C. Farquharson, Farquharson & Gifford Co., and Charles A. Moore, Stratford Manufacturing Co., and these gentlemen were accompanied by Mrs. Salter, Mrs. Trebell and Mrs. Moore. The places visited included Montreal, Quebec, Campbellton, Newcastle, Chatham, Halifax, Yarmouth, Windsor, Charlottetown, Summerside, Moncton, St. John and Fredericton.

“These trips,” states Mr. Moore, “are not to solicit business but to meet the trade personally, and get acquainted with our own country. In this way we can see the difficulties that our customers are up against, and also see conditions personally. We certainly were amazed that the Maritime Provinces are not getting the sympathy they should from the rest of Canada. This is becoming a very serious matter. The problem of immigration is one in particular. So many of their own people are leaving for either the United States or Western Canada, while the immigrants, who come from Europe, pass right through to Ontario or the West. We find that the Maritime Provinces are just as full of possibilities as the rest of Canada, and we think that it should be the duty of every member of Parliament, to make a trip from coast to coast, and study conditions first hand. We have done that now, and, we can sympathize with the Westerner or Easterner in any problems that they bring up, and trips such as this from a national standpoint do much to bring together the citizens of Canada, and help to overcome these difficulties and of course that goes to make a bigger and better Canada.

“The large cities and towns are well equipped to take care of a large population.

They have good roads, fine farming country, and of course wonderful possibilities in lumbering.

“We were very much taken with Prince Edward Island which is a garden from end to end. We were well treated by the trade that we called on, and each town certainly made things very pleasant for us.

“We consider too, that it is the duty of every manufacturer who is doing a business with Canada, to make a trip either in a body of eight or ten or by himself, to get a grasp on the possibilities of this great country of ours. It would broaden him out, and, he would see difficulties that his customers are up against, of which he has no idea if he stays at home.”

Use of Natural Gas

The Department of Mines of Ontario desires to advise our members who are using natural gas for manufacturing and industrial purposes that it has become absolutely necessary, in view of the alarming decrease in the natural gas fields, to confine its use to domestic purposes.

The Commissioner of Gas intimates that the use of electricity and fuel oil for many industrial purposes has already passed the experimental stage and there are appliances now in existence which would serve the purposes of the manufacturers who heretofore used natural gas. These appliances, he states, are too numerous to specify, but, speaking broadly, include the heating of all ovens,—enamelling, japanning and baking core ovens, furnaces for heating, testing and hardening and for supplying heat under all types of boilers and in all types of furnaces.

Whilst it is the intention of the Commissioner to make orders limiting the use of natural gas in the manner indicated, it would be difficult to frame an order that will fully cover all uses of natural gas. Therefore, any cases which are in doubt will be subject to personal investigation by a qualified inspector under the Commissioner of Gas.

Any special circumstance should be communicated to R. B. Harkness, Commissioner of Gas, Department of Mines, Toronto.

Changes Made in Postal Rates

Letter Postage within Empire increased—Insurance for Parcel Post Packages after October 1st

FROM the 1st of October, 1921, the rate of postage on letters from Canada to other places in the Empire has been fixed at 3 cents an ounce or fraction thereof.

As an example of the above, it is pointed out that as the prepayment required on letters posted for delivery within the Empire now includes the war tax of one cent each, letters weighing one ounce or less, to places outside of Canada but within the Empire, should be prepaid four cents. Letters weighing more than an ounce should be prepaid four cents for the first ounce and 3 cents for each subsequent ounce or fraction of an ounce.

As a consequence of the Postal Convention adopted by the Universal Postal Union Congress held at Madrid last year, the following changes in postage rates will come into effect on the 1st October, 1921.

LETTERS—The rate on letters to places outside of Canada with the exception of places in the Empire (included in list commencing page 74 of the 1921 Postal Guide), the United States and Mexico (to which places the Canadian domestic rate applies) will be 10 cents for each letter weighing one ounce or less. On letters weighing more than an ounce, the rate will be 10 cents for the first ounce, and 5 cents for each subsequent ounce or fraction of an ounce.

POSTCARDS—The rate on postcards to places outside of Canada with the exception of places in the Empire, the United States and Mexico, (to which places the present rate will continue to apply) will be 6 cents for a single card or for each half of a reply card.

PRINTED MATTER—The rate on printed matter to places outside of Canada with the exception of the United States and Mexico and with the exception of Canadian papers and periodicals to some parts of the Empire (for places enquire at Post Office) will be 2 cents for every 2 ounces or fraction of 2 ounces for each article of packets bearing a separate address.

LITERATURE FOR THE BLIND—The rate on literature for the blind to places outside of Canada, with the exception of places in the United States, Mexico and Newfoundland (to which places literature for the blind is free of postage) will be 1 cent per pound or fraction of a pound.

COMMERCIAL PAPERS—The rate on commercial paper to places outside of Canada will be 10 cents for a package not exceeding 10 ounces in weight and 2 cents for every 2 ounces or fraction of 2 ounces thereafter.

SAMPLES—The rate on samples to places outside of Canada other than the United States and Mexico will be 4 cents for a package not exceeding 4 ounces in weight and 2 cents for every 2 ounces or fraction of 2 ounces thereafter. The Postmaster will please amend Sections 38 and 39, page 61; page 74; and list commencing page 234 of the 1921 Postal Guide accordingly.

ACKNOWLEDGEMENT OF RECEIPT (A.R.)—The fee for an Acknowledgment of Receipt of a registered article addressed to any place whether within or outside of Canada will be 10 cents, if the Acknowledgment of Receipt is requested at the time of posting of the registered article. The fee will be 20 cents, if the Acknowledgment of Receipt is requested after the posting of the registered article.

Insurance of Parcel Post

The registration of parcels by "Parcel Post" will be discontinued on the 1st of

October, 1921, and an insurance of parcel post will be introduced, whereby parcels posted in Canada for delivery within Canada which conform to parcel post regulations, may be accepted for insurance up to \$100.00 against loss, rifling or damage while in the custody of the Canadian Postal Service.

The scale of insurance fees will be as follows:

3c for insurance not exceeding \$5.

6c for insurance exceeding \$5 and not exceeding \$25.

12c for insurance exceeding \$25 and not exceeding \$50.

30c for insurance exceeding \$50 and not exceeding \$100.

The insurance fee is to be paid by means

Courtesies That Employment-Seekers Appreciate

By DONALD M. McLEAN

WHO has not been struck, when scanning the advertising columns of British engineering periodicals, by the number of advertisements inserted by firms who have previously advertised for assistants of various kinds, thanking all applicants in a simple, kindly way, and notifying them either that the position had been filled, or as in the example below stating that those selected for interview had been written to?

"Regarding Advertisement for TECHNICAL ASSISTANT for Metal Works, Box C-261, Advertiser wishes to thank all Applicants and would inform them that those selected for interview have been written to."

An occasional instance of this kind is found on this side of the water, but observation convinces us that it occurs only in a small fraction of one per cent. of the cases where assistants are advertised for.

From experience in answering such advertisements and later as an advertiser for assistants, the writer would say that the three principal reasons for the failure on the part of the average employer to follow the practice referred to above are inattention, supposed lack of time and a desire not to reveal the identity of the firm.

Too often after a batch of applications have been summarized and a selection made, the letters from the unsuccessful applicants pass quickly either to the waste basket or the recesses of the office files, without a thought of the numerous persons who are anxiously awaiting results of their response to the solicitation of the employer's advertisement, so that they may take other action. The fact that one does not hear anything from the advertiser within a week or two is not convincing, as usually the matter narrows itself down to a choice between but a few candidates, and it often takes several weeks to reach a final decision.

In the mass there is really a considerable amount of delay and sometimes real hardship imposed upon applicants through the omission to advise them in some simple manner that the position is no longer open, or that certain candidates have been selected for investigation. When, as in some cases, the advertiser fails to return samples of work,

of postage stamps affixed to parcels by the sender. Parcels for insurance should not be dropped into a box but should be handed in at the post office. A receipt will be given the sender which must be produced if a claim is made.

Arrangements may be made whereby firms mailing parcels in quantity may in order to expedite despatch fill in the insurance receipt forms and stubs, and stamp and number the insured parcels. To each such firm a "block" of insurance numbers will be assigned and insurance receipts pads and a rubber hand stamp "insured parcel number" stamp be supplied. For instance if it is estimated that a firm will mail 2000 insured parcels during a year, a "block" of 2000 consecutive numbers will be assigned to that firm and a record kept of these numbers so that the same numbers will not be used by the post office or by another firm mailing at this office. Each parcel to be insured must bear the name and address of the sender.

original letters, etc., unnecessary embarrassment is forced upon the applicant.

In an endeavor to bring about helpful co-operation between employer-advertisers and applicants responding to their advertisements, a prominent group of trade papers has occasionally printed the following suggestion:

"Put Yourself in the Place of the Other Fellow."

"Now won't you help keep our readers interested in this advertising by acknowledging every application received, even if you only return the letters of unsuccessful applicants to them marked, say, 'position filled, thank you.' If you don't care to reveal your identity, mail them in plain envelopes."

When business returns to normal and the unemployed are once more absorbed by our industries, and employers generally have to advertise for help of any kind, should we not put into force the simple little practice of at least returning unaccepted applications, marked as suggested in the quotation above, or insert a small advertisement in the same column as that in which appeared our original advertisement, perhaps after the style of that first shown above? Doing this incognito is building better industrial relations in a general way, but beyond a doubt, the firm which will insert such an advertisement over its own signature will build up a remarkable amount of good-will and appreciation of its progressiveness and consideration.

British Columbia Export Club Formed

On September 16, there was formed at the Board of Trade rooms in Vancouver, the British Columbia Export Club, with the development of British Columbia's export trade as its chief objective. The Club starts with a membership of about 75, including practically all the leading industries of Vancouver, Victoria and New Westminster. It is affiliated with the Canadian National Export Club. A committee, consisting of W. R. Herbert, B. A. Paint Co.; H. H. McDougall, Morrison Steel & Wire Co.; H. Reifel, Vancouver Breweries and R. C. Holbrook, Canadian Carbonate Co., was formed to make nominations and carry out organization work.

—And He Tempered it With Common Sense

By O. F. LEWIS

FOR generations, people wound their watches with keys. They carried the keys in their pockets, and the little hole in the key would fill up with dirt. The key was good for nothing till the dirt was removed.

Finally, a farmer knocked a little hole in the side of the key, pushed a stiff straw through the side of the key, and removed the dirt instantly. He patented the idea, and got rich. He tempered a Necessity with Common Sense.

You perhaps know that Common Sense is so rare that some languages have no adequate word for it.

Baseball was played after working hours in a certain city, but without system or without any league of clubs. Daylight-saving came along adding an hour of sunlight. A practical business man saw that hour of light, formed a Twilight Baseball League, and revolutionized the community's amateur athletic situation.

Men finished their mill or factory work at five, ate supper early and then played or watched seven innings of baseball from six to eight o'clock. The different industries entered into friendly competition, and better feeling spread not only throughout the town, but between employer and employee.

Common sense is a gyroscope, applied to a big idea to make it practical. The gyroscope on a machine helps it keep its balance. A gyroscopic top spins in an upright position, no matter where you put it.

Community Service is a new movement aiming to apply common sense to the great amusement wave now sweeping the country. Untold millions in money have been spent on recreation these last few years. Because millions were spent destructively for "booze" through so many years, the saloon had to go, even though it carried with it the "poor man's club," a valuable social institution.

The new movement, Community Service, Incorporated, (with headquarters at One Madison Avenue, New York) believes opportunities for wholesome amusements and recreations should be distributed throughout all communities in the country.

Every healthy Canadian or American wants to have a good time. There's time for play, as well as for work, but the chances for the right kind of play are often wholly lacking. When are communities going to realize that there's an enormous truth in the old adage that Satan finds work for idle hands to do?

Ex-Governor Stokes of New Jersey, a man of big social experience told the Federation of Women's Clubs in New Jersey last December that "there is one field—the leisure hours of the people—which needs the attention of church and state."

"Here is a field," he said, "that legislation has scarcely touched. Few people have temptations in the hours of toil. The temptations come in the hours of idleness. Our forms of amusement could be wonderfully improved, and our people could be taught to love the right as well as the wrong."

Should there not be in every community reasonable chances for all the people to find healthy, clean and useful amusements and recreation?

Let us temper the enormous amusement and recreation problem in North America with common sense!

Standardizing Watthour Meters

Sub-committee of Canadian Engineering Standards Association Holds Meeting in Toronto.

A meeting of the sub-committee on Watthour meters of the Canadian Engineering Standards Association was held at the Engineers' Club, Toronto, on August 25, with Professor L. W. Gill in the chair.

Considerable progress was made in preparing a revised draft of the proposed "Standard Requirements for Watthour Meters," the committee taking up first various points connected with watthour meters for alternating current; direct current meters being left for later consideration.

Fifteen members were present, nominated by the meter manufacturers, the Canadian Electrical Association, the large power com-

panies, the Hydro-Electric Commission of Ontario, the Electrical Supply Manufacturers' Association, and the Dominion Government Electrical Inspection Department.

It is expected that substantial agreement will be reached on such points as standard methods of testing for accuracy, uniform methods of marking, rating, and connection, and standard requirements for potential and current transformers and other accessories, and that it will be found possible to effect economy by limiting the number of sizes and types of watthour meter to be recognized as standard for regular production.

Water Power Resources of Canada*

By J. T. J.

DURING the past two years there has been under way in the Dominion Water Power Branch a careful re-analysis and computation of Canada's water power resources. All existing stream flow and power data, available from Dominion and Provincial sources, have been systematically collated, analysed and co-ordinated with a view to preparing on a uniform basis from coast to coast, revised estimates of the power available. While the analysis is not yet finally completed, sufficient progress has been made to warrant the publication of the figures given herein.

The total available and developed power resources are presented in a manner not heretofore adopted. A consideration of the figures will indicate that they place the water power resources of the Dominion in a much more favourable light than have previously published compilations.

While the resources have been exhaustively analysed in so far as the information available will permit, it should be kept in mind that only very meagre data is to hand in many districts and for many rivers.

Basis of Computation

The figures listed in the accompanying table are based upon rapids, falls and power sites of which the actual existent drop or the head possible of concentration, is definitely known or at least well established. Innumerable rapids and falls of greater or lesser power capacity are scattered on rivers and streams from coast to coast which are not as yet recorded, and which will only become available for tabulation as more detailed survey work is undertaken and completed. This is particularly true in the more unexplored northern districts. Nor is any consideration given to the power concentrations, which are feasible on rivers and streams of gradual gradient, where economic heads may be created by the construction of power dams, excepting only at such points as definite studies have been carried out and the results made matters of records.

In brief, the figures hereunder are based on definite rapids, falls and power sites, and may be said to represent the *minimum water power possibilities* of the Dominion.

The power estimates have been calculated on the basis of 24-hour power at 80% efficiency on the basis of "Ordinary Minimum Flow" and "Estimated Flow for Maximum Development." The "Ordinary Minimum Flow" is based on the averages of the minimum flow for the lowest two consecutive seven day periods in each year, over the period for which records are available. The "Estimated Flow for Maximum Development" is based upon the continuous power indicated by the flow of the stream for six months in the year. The actual method to determine this flow is to arrange the months of each year according to the day of the lowest flow in each. The lowest of the six high months is taken as the basic month. The average flow of the lowest seven consecutive days in this month determines the maximum for that year. The average of such maximum figures for all years in the period for which data are available is the estimated maximum used in the calculation.

This estimated maximum development is based upon the assumption that it is good commercial practice to develop wheel installation up to an amount, the continuance of which can be

*From a bulletin issued recently by Dominion Water Power Branch, Department of the Interior, Ottawa.

assured during six months of the year, on the assumption that the deficiency in power during the remainder of the year can be profitably provided from storage or by the installation of fuel power plants as auxiliaries. The correctness or otherwise of this assumption for any particular site can only be definitely settled by the careful consideration of all circumstances and conditions pertinent to its development. The method, however, enables us to make a fairly satisfactory overall estimate of the maximum hydraulic power available, as distinctive from the estimated ordinary minimum power available.

Available and Developed Totals

The recorded power available throughout the Dominion, under conditions of ordinary minimum flow and within the limitations set out in the foregoing, is 18,255,000 h.p. The water power available under estimated flow for maximum development, i. e., dependable for at least six months of the year is 32,076,000 h.p. (For details see the table attached.)

There are installed throughout the Dominion water wheels and turbines to the extent of 2,471,000 h.p. However, it would not be correct to place this figure in direct comparison with the minimum or maximum available power figures quoted above and therefrom deduce the percentage of the available water power resources developed to date. An allowance must be made for the average ratio between the water wheels installed and the power available.

An analysis of the water power plants scattered from coast to coast, concerning which complete information is available as to turbine installation and satisfactory information as to stream flow, gives an average machine installation 30% greater than the six month flow maximum power. Applying this, the figures quoted above therefore indicate that *at present recorded water power resources* of the Dominion will permit of a turbine installation of 41,700,000 h.p. In other words the present turbine installation represents only 5.9 per cent of the present recorded water power resources.

Progress During Past Year

In spite of the outstanding facts that financial and commercial conditions are still far from normal and that costs of construction are almost prohibitive for all but absolutely necessary undertakings, there has been during the past year and is now, marked activity in hydro power construction. This has resulted from a variety of causes principal among which is the lack of native coal in the central industrial district and the fortunate location of economic water power sites to industrial centres.

The total hydro power development installed during the past year or now under construction represents approximately 560,000 h.p. of installed capacity. This figure includes only the initial installations of plants under construction, not their ultimate designed capacity. It is evidence of the manner in which the water power resources of the Dominion are being put to effective and productive use.

Future Growth in Utilization

It is profitable to consider the history of water power utilization in Canada during the past few years in conjunction with the present activity with a view to making some reasonable forecast as to its probable future growth. Should the rate of water wheel installation during the past fifteen years be maintained, there will be installed in 1925, 3,360,000 h.p.; in 1930, 4,110,000; in 1935, 4,860,000 h.p. and in 1940, 5,600,000 horse power. In view of the increasing appreciation of the advantages of hydro power combined with the fortunate location of ample supplies within easy transmission distance of practically every great industrial centre throughout the Dominion, there is every reason to anticipate that the rate of growth in utilization will be accelerated rather than retarded. Reference to the foregoing totals of water power available will indicate that this anticipated increase in utilization will not seriously reduce the total reserves. Canada possesses sufficient reserves of water power to meet all anticipated demands for many years to come.

In order to ensure the most beneficial utilization of these reserves and to provide intelligent guidance for their development, two essentials are required:—

1st.—An accurate knowledge of the location and the engineering and economic possibilities of development of the water powers throughout the Dominion, together with their relationship

to other natural resources of mine and forest, to industrial centres and opportunities, to transportation systems—rail and navigation, to coal and fuel supplies, to irrigation, drainage and reclamation projects, to alternative sources of power and to market for and uses of power in general.

2nd.—A sound governmental administrative policy designed to protect the public from inadvisable and ill-designed power schemes and to provide for reasonable regulation and revision of rates and rentals, and at the same time to ensure satisfactory guarantees for the encouragement of legitimate investment in hydro power enterprises.

True conservation of our water power resources, which are inexhaustible through use, lies, not in withholding them from development, but in their efficient utilization in the public interest for the economic exploitation of our other natural resources, and for the conservation of our exhaustible fuel supplies.

The water power now developed in Canada represents an investment of \$475,000,000. In 1940 should the rate of growth in installation during the past 15 years be continued, this investment will have grown to over \$1,000,000,000. The present development represents an annual equivalent of \$18,500,000 tons of coal which, valued at \$8 per ton, represents \$148,000,000. In the year 1940 these annual figures will, with the foregoing assumption, have become 42,000,000 tons and \$336,000,000. These figures are striking evidence of the outstanding importance and necessity of an intelligent administrative policy governing the development of our water power resources.

Available and Developed Water Power in Canada

PROVINCE	Available 24-hr. Power at 80% Efficiency		Turbine Installation h.p.
	At Ordinary Min. Flow h.p.	At Est. Flow for Max. Dev. (De- pendable for 6 mos) h.p.	
1	2	3	4
British Columbia	1,931,142	5,103,460	304,535
Alberta	475,281	1,137,505	32,492
Saskatchewan	513,481	1,087,756	
Manitoba	3,270,491	5,769,444	83,447
Ontario	4,950,300	6,808,190	1,052,048
Quebec	6,915,244	11,640,052	925,972
New Brunswick	50,406	120,807	21,180
Nova Scotia	20,751	128,264	35,774
Prince Edward Island	3,000	5,270	1,933
Yukon & N'thw't Territories	125,220	275,250	13,199
	18,255,316	32,075,988	2,470,580

The figures listed in Columns 2 and 3 in the above table represent 24-hr. power and are based upon rapids, falls and power sites of which the actual existent drop or the head possible of concentration, is definitely known or at least well established. Innumerable rapids and falls of greater or lesser power capacity are scattered on rivers and streams from coast to coast which are not as yet recorded, and which will only become available for tabulation as more detailed survey work is undertaken and completed. This is particularly true in the more unexplored northern districts. Nor is any consideration given to the power concentrations which are feasible on rivers and streams of gradual gradient, where economic heads may be created by the construction of power dams, excepting only at such points as definite studies have been carried out and the results made matters of record.

The figures in Column 4 represent the actual water wheels installed throughout the Dominion. These figures should not be placed in direct comparison with the available power figures in Columns 2 and 3 for the purpose of deducting therefrom the percentage of the available water power resources developed to date. The actual water wheel installation throughout the Dominion averages 30% greater than corresponding maximum available power figures calculated as in Column 3. The figures quoted above therefore indicate that the *at present recorded water power resources* of the Dominion will permit of a turbine installation of 4,700,000 horse power. In other words, the present turbine installation represents only 5.9 per cent. of the present recorded water power resources.

The above figures may be said to represent the *minimum water power possibilities* of the Dominion.

As illustrative of this the detailed analyses which have been made of the water power resources of the provinces of New Brunswick and Nova Scotia have disclosed most advantageous reservoir facilities for regulating stream flow and it is estimated that the two provinces possess within their respective borders 200,000 and 300,000 commercial horse power. These figures provide for a diversity factor between installed power and consumers' demands.

Establish New Record

Satisfactory Showing Made by the Canada Bread Company, Limited, in Past Year

A new record in the volume of business done is shown by the annual statement of the Canada Bread Company, Limited for the year ended June 30th, 1921. During the year three new plants were opened and an increase in net revenue is the result.

Revenue, after charging bond interest, amounted to \$307,122.46, as against a manufacturing profit of \$293,881.40 last year before charging bond interest of \$67,199.50. Interest from investments is shown at \$17,953.48, compared with \$16,237.22. Balance on July 1, 1921, amounted to \$172,295, compared with \$103,418 on the same date in 1919. Charges, in addition to bond interest, against the three sources of revenue mentioned above, were depreciation on plant, \$60,000, compared with \$50,000 during the year preceding; bond purchases, \$12,500; income tax, 1919-1920, \$15,287; preferred dividends, \$87,500, leaving a balance to be carried forward as at June 30, 1921, of \$322,083.

Cash assets and investments amount to \$428,180, while bonded indebtedness with interest accrued amounts to \$1,133,134.

Lake Superior Corporation

Reduction in Net Earnings Results in Passing the Payment of Bond Interest

Although production generally increased in the various plants of the Lake Superior Corporation during the year ended June 30th, conditions which developed in the latter half of the fiscal year resulted in a large reduction of net earnings from the operations of subsidiary companies. The net earnings are shown in the annual report to be \$1,541,293 as compared with \$3,722,152 in the previous year. This has had the effect of prohibiting the payment of interest on the income bonds.

The working capital of the Algoma Steel Corporation, the principal subsidiary, has been impaired, current assets of \$11,052,466 comparing with \$13,484,878 last year, while current liabilities are \$4,924,647 against \$4,773,031 a year ago. Total assets are reduced to \$53,712,634 from \$56,027,174 last year.

Respecting the other subsidiaries, it is stated that net earnings before bond interest on the Algoma Central and Hudson's Bay Railway were \$197,231, as against a deficit for the previous year of \$169,071. The Algoma Eastern Railway Co. had a deficit of \$49,113 after bond interest and all other charges, including depreciation, as compared with \$636,792 in the previous year, while production by the Lake Superior Co. was 235,933 tons, compared with 222,799 tons.

Profits are Reduced

Dominion Foundries and Steel, Limited, Pass Dividend on Preferred Stock

The profits of Dominion Foundries & Steel, Limited, for 1920 are shown in the annual statement as \$204,369 which compares with \$654,000 a year ago and \$1,228,614 in the year previous. The dividend on preferred stock was recently passed and the statement shows current assets of \$1,681,115 and current liabilities of \$2,071,743. Current assets include inventories of \$845,547; accounts receivable, \$776,740, and cash, \$58,827. Current liabilities include bank advances (secured) \$750,000; accounts payable, \$804,725; accrued wages, etc., \$95,018, and business profits war tax for 1918, \$422,000. The Dominion Government taxes for 1919 and 1920 also remain unpaid, but against them is a profit and loss item of \$701,088.

Under the heading of investments, the company report \$600,000 in preferred shares in Adirondack Steel Foundries Corporation, and 26,300 ordinary shares of no par value, entered up at the total nominal

value of \$1. The sum of \$1,065,889 is included in the assets for good will, patents, etc., while land, buildings, etc., are put in at \$3,409,723.

In profit and loss account the balance forward in 1919 was \$697,261, which, with the profits and an item of \$16,500 profit on sale of 3,200 Adirondack Steel common shares, made a total for distribution of \$918,130. Appropriation of \$40,000 was made for depreciation, and dividends paid \$177,042, leaving \$701,488, balance at December 31, 1920.

Business Has Increased

Canadian Wm. A. Rogers, Limited, Issues Statement for Eighteen Months' Operation.

Reporting for the period of 18 months ended December 31, 1920, the Canadian Wm. A. Rogers, Ltd., in a statement forwarded to shareholders, reveals a volume of business and net profits greatly in excess of those of any similar period in the company's experience. Profits for the 18 months were \$198,310, compared with \$42,885 for the year ended June 30, 1919. A dividend of 7 per cent. on preference stock for the year ended March 31, 1920, was paid, amounting to \$35,000, and, after other deductions for taxes and realty and plant reserve, there was carried forward \$13,950.

There had been a debit balance at the end of the previous period amounting to \$100,786, which was reduced by \$75,000 through surrender of common stock, leaving a debit balance of \$25,786. Inventories were written down at the end of 1920 to replacement values and the shrinkage charged to operating expense, according to President S. J. Moore. In March, 1920, the preference stock was increased by \$250,000, and the common stock reduced by a like amount. The additional preference shares were issued to Wm. A. Rogers, Ltd., in accordance with the agreement approved by the shareholders, and the \$250,000 common stock surrendered and cancelled.

"The company's business has grown steadily during the past five years," says President Moore, "the average annual gain in shipments being over 30 per cent. Since last autumn, however, there has been a great falling off in the silverware business, and this condition is likely to continue throughout the year."

The company's liquid position is materially improved, current assets being \$541,140, compared with \$386,431, while current liabilities are \$436,045, compared with \$420,072.

An Excellent Year

Fraser Companies, Limited, Show a Good Increase in Profits for 1920.

The annual statement of the Fraser Companies, Limited, just issued, shows that company to have had an excellent year. In issuing the statement President Archibald Fraser said:

"The first few months of the current year witnessed a marked cessation in demand for pulp and lumber products. As a result, your pulp mills until recently were not in continuous operation. Orders are now being received, however, in steadily increasing volume and your pulp mills at Edmundston and Chatham are now operating satisfactorily on current business."

Profits for the year ended December 31, 1920, show a good increase over the previous year. Profits from operations, after depreciation of inventories, amounted to \$2,157,618. Deductions of \$441,356 for interest and charges on bonds, and bank loans, and of \$439,960 for depreciation of plant and equipment left net profits of \$1,276,301, or 12.7 per cent. available for dividends on the common stock, amounting to \$10,000,000.

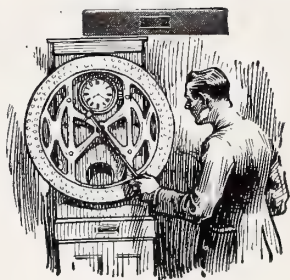
This is the first report of the company since the issue of \$2,000,000 first mortgage six per cent. serial gold bonds a few months ago. The report indicates that about \$1,500,000 was available for the payment of 6 per cent. interest on the outstanding bonds of slightly less than \$2,500,000, or over 60 per cent., this comprising the whole funded indebtedness of the company.

After allowing \$279,462 for Government taxes covering 1919 and 1920, there would remain \$1,200,000 available for bond interest, or over eight times what was required. Of these taxes \$185,000 has been paid since the beginning of the present year. After deducting \$200,000 for the Fraser Memorial Hospital, at Fredericton and \$100,000 for dividends, there remained \$976,301 to be carried forward to profit and loss.



SUPPOSE

—the Time Schedule were Swept Out of the Office



Dial Recorder



Card Recorder



Job Recorder

—and SUPPOSE the employees were told:—

“Come to work when you like and leave when you like—

—and SUPPOSE, again, that they were told:—“There is the correspondence to be attended to; the invoices are to be checked; the orders to be cared for; the filing to be done; the payroll to be made up—but hereafter the staff is to do what it likes,—when it likes—”

—but, why “suppose” further? An office in such a condition of anarchy and “jungle rule” is unthinkable, inconceivable—

Orderly progress in office or factory begins and ends with the Time Schedule.

The Time Schedule, logically carried out, is the greatest safeguard of all that the employee works for and hopes for.

The employee who says: “I object to registering on a Time Recorder; it is an affront to my dignity and a reflection on my services,” is living in a Fool’s Paradise.

Let such an objector to the Time Schedule ask himself “Without it—what?” How long would dignity flourish under “jungle rule?”

The Time Recorder is not the destroyer of dignity. On the contrary, it is the creator of the only conditions under which true dignity is possible.

The punctual and ambitious worker asks nothing more than that his work shall speak for itself. In the office or factory which uses International Time Systems it DOES speak for itself, every day—DIRECT to the management. It is the faithful employee’s best protection against the filching of his reward by the slothful, careless co-employee and the best guarantee that his loyalty is not overlooked by his employer.

Many a worthy man has not been advanced because of the lack of a proper record of his faithfulness.

Many a man has been advanced to the highest position in his business because of a clean record of efficiency.

The International Time Recorder with its mechanical and errorless records is the best equipped instrument in the world for the logical carrying out of the Time Schedule in office or factory.

INTERNATIONAL

For your convenience we have Service and Sales Offices in Vancouver, Winnipeg, Walkerville, London, Hamilton, Toronto, Ottawa, Montreal, Quebec, Halifax, St. John, Nfld.

Also manufacturers of
International Dayton Scales and International Electric Tabulators and Sorters.

An office staff of 40 persons —and no Time Recorder

Let's say—

You employ 40 persons in your office
They average 15 minutes lost time a day

10 hours lost time a day
300 working days.

3,000 wasted hours a year
50c an hour (a low average)

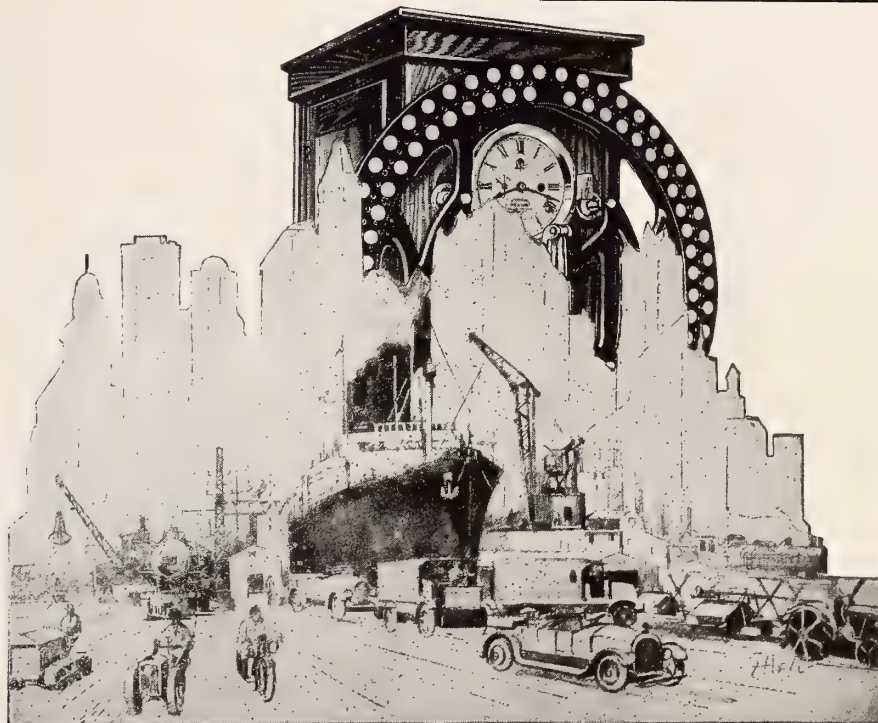
\$1,500 thrown away.

Capitalized at 6% this \$1,500 would give you the use of \$25,000 extra working funds for a year. This is only part of what it costs to be without an International Time Recording System.

By the use of the clearly-printed, indisputable Time Records you can reduce the work of cost and payroll accounting to the minimum. But, above, all you can bring to bear in your office a steady, silent, educative influence, possible by no other means, in the promotion of punctuality.

No office staff is truly fitted for its work today which has not learned to think and act in terms of TIME. Without a word of reprimand, thousands of office workers have been brought to a keener and truer sense of the fact that "Punctuality is the Soul of Business" through the medium of the International Time Recorder.

International Time Systems protect the worker and correct the shirker. They save money, increase profits and promote goodwill.



**What would
25,000 extra
dollars mean
to you if it
were put
into your
business
for a year?
Are you
throwing it
away in
wasted time?**

BUSINESS MACHINES CO., LIMITED

FRANK E. MUTTON, Vice-President and General Manager

Head Office and Factory:

ROYCE AND CAMPBELL AVENUES, TORONTO

Plant Closes Down

International Nickel Company, Limited, Suspend Operations of Smelter and Refinery.

Announcement was made during August that mines and smelter of the International Nickel Company, Limited, at Copper Cliff and Creighton and the refinery at Port Colborne would suspend operations. The company have a large supply of their product on hand as well as a heavy tonnage of matte and untreated ore. They have been gradually curtailing operations during the past few months and there have been two cuts in wages, each of 15 per cent. Officials of the company stated that there was little hope of re-opening within six months.

Net Profits Increase

Canadian Locomotive Company, Limited, Have a Very Satisfactory Year.

The net profits of the Canadian Locomotive Company, Limited, for the fiscal year ended June 30th, 1921, were the second largest in the history of the organization, amounting to \$827,091.62. This was an increase of \$459,122.60 over the previous year, when the operations of the company were greatly curtailed by a strike, but a decrease of \$65,884.71 from the earnings made two years ago, when industries were more normal, but still much better than those that prevail to-day. The profits in 1919 were the largest ever attained, and those of the past year are the second largest.

The net profits in the ten years covered by the company's operations were as follows:

1912.....	\$ 326,380.43
1913.....	396,886.02
1914.....	342,057.25
1915.....	134,613.89
1916.....	574,211.78
1917.....	721,254.90
1918.....	677,937.02
1919.....	892,976.33
1920.....	367,969.02
1921.....	827,091.62

which makes an aggregate sum of.....\$5,261,378.26
or an average net earning of \$526,137.83 per annum.

The net profits during the past year from operations after charging income tax and all other charges, was \$767,891.56, while the interest from investments was \$59,200.06, making a net profit of \$827,091.62.

From this profit is deducted in the interest from first mortgage bonds, provision for general depreciation, and provision to reduce investments to market value, a total of \$221,800.00, leaving a balance of \$605,291.62. The balance on credit July 1st, 1920, was \$1,210,983.72, making a total balance of \$1,816,275.34.

With sinking fund provision and dividends for the year deducted, the balance at credit on June 30th, 1921, was \$1,536,275.34.

The assets of the company aggregate \$7,842,759.53.

American Cyanamid Co.

Profits Show Considerable Decrease Over Previous Year, But Surplus Continues to Increase.

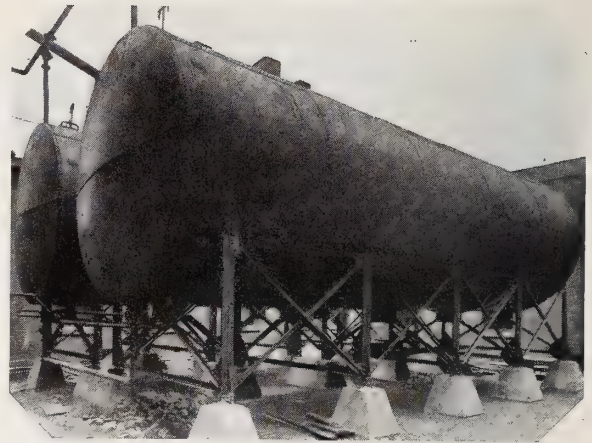
The annual report of the American Cyanamid Company for the year ended June 30, 1921, states that operations were conducted at full capacity up to December 31, 1920. About January 1 the effects of the general business depression began to be reflected in the demand for the company's product and operations were curtailed.

The following comparative figures will illustrate the position of the company:

	1921	1920
Total Sales.....	\$6,046,049	\$8,684,089
Cost of sales.....	5,303,478	6,611,195
Gross Profits.....	\$ 743,171	\$2,072,889
Selling and General Expenses.....	245,658	356,528
Net profit on sales.....	\$497,513	\$1,716,360
Miscellaneous Income.....	152,549	375,816
Interest charges.....	\$650,062	\$2,092,176
	55,949	68,481
Profit subsidiary.....	\$594,113	\$2,023,695
	83,972	71,156
Reserve, etc.....	\$ 678,085	\$2,094,852
	333,975	568,975
Net income.....	\$344,110	\$1,525,876

The surplus account showed an increase of \$898,860 and now stands at \$3,291,489. The preferred stock has been reduced by purchase to the extent of \$2,398,300, thus leaving a balance of \$559,900.

T I W



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PNEUMATIC
WATER SUPPLY TANKS
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BOILER BREECHING
RIVETED STEEL PIPE
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Construction erected anywhere

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LIMITED
HEAD OFFICE: ROYAL BANK BLDG. TORONTO WORKS: CHERRY STREET.

T I W

Deaths Among Prominent Manufacturers

William Apsley Robinson

Former President of the D. Moore Company, Limited,
Dies in Hamilton.

At Hamilton, on August 31st, occurred the death of William Apsley Robinson, who during his long life was prominently identified with Canadian development both in transportation and manufacturing circles. He was born in Birmingham, England, eighty-three years ago and received his mechanical education there. After a period of service with the London & Northwestern Railway Company, he came to Canada and in 1862 became superintendent of the locomotive and car departments of the Great Western Railway.

In 1875 Mr. Robinson retired from railroading and entered into partnership with the late Dennis Moore, founder of the D. Moore Company, Limited, stove founders, of Hamilton. He was appointed President and General Manager of the company and held this position until his retirement.

John G. Turnbull

Director and Sales Manager of the C. Turnbull Knitting Company, Galt

On September 6th, John G. Turnbull, director and sales manager of the C. Turnbull Knitting Company, Galt, Ontario, died in his 59th year. His death was caused by a stroke of paralysis following a game of golf in Stratford a week before.

Mr. Turnbull was born and educated in Galt and early in life entered the business established by his father, the late Robert Turnbull in 1858. He was a successful business man and a community worker, always striving for the advancement of any project for improvement in his native city. He had served as alderman and reeve

and at the time of his death was chairman of the Suburban Roads Commission and one of the most active members of the Board of Trade.

John Patterson

Founder and President of the Patterson Candy Company, Limited, Toronto.

John Patterson, founder and president of the Patterson Candy Company, Limited, Toronto, died at his home on August 18th, after an illness of several months. The late manufacturer was born in Ireland in 1860 and came to Canada in 1875. In 1882 he was apprenticed to the confectionery trade in Toronto and six years later opened a retail store from which the present business has grown. His first factory was built in 1898 and the present one on Queen Street West, in 1912. He was a member of the C. M. A. for several years.

Winnipeg Warehouse Property

FOR SALE OR FOR RENT

Trustees' sale of valuable downtown warehouse properties in the City of Winnipeg

PARCEL 1—Warehouse and property located at 185-187 Market Street East; 99'x99.2'; highly modern, five-storey warehouse of stone and solid brick mill construction; 60,000 square feet, unexcelled business location, with trackage at rear. Possession given 1st. July, 1921, or earlier. PRICE AND TERMS ON APPLICATION.

PARCEL 2—100'x100' valuable vacant wholesale site, being lots 11 and 12 St. John plan 45, known as 170 and 172 James Street; ideal trackage facilities at rear and immediately behind parcel 1; splendid location in the heart of the city. Price per foot.....\$500.00

For further particulars apply to:

The STANDARD TRUSTS COMPANY
WINNIPEG - MANITOBA



Manufacturers, Remember This:

There may be a time when you will always require a stock of your goods in the City of Toronto.

Perhaps you could profit from such an arrangement right now—perhaps you could keep your jobbers, wholesalers or selling agents better supplied if such were the case.

Scores of Canadian and American manufacturers are doing this now. They are making use of Howell Distributing and Warehouse Facilities.

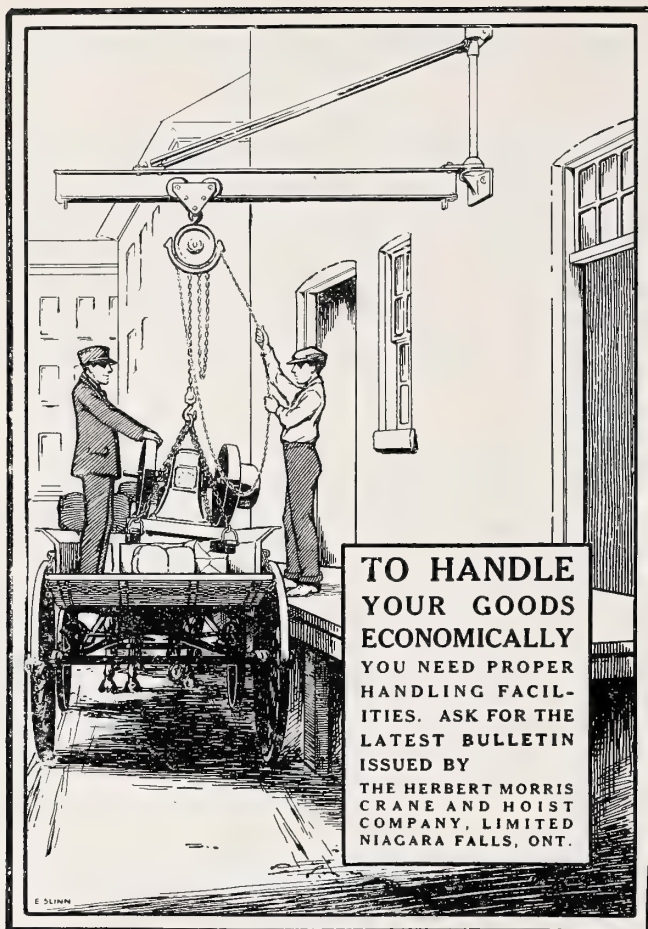
Our Services embrace many saving features which may interest you. Let us outline our proposition to you.

The HOWELL WAREHOUSES Limited.


General Mercantile Distributors

311 King st East. TORONTO. Phone Main 7580





**TO HANDLE
YOUR GOODS
ECONOMICALLY
YOU NEED PROPER
HANDLING FACIL-
ITIES. ASK FOR THE
LATEST BULLETIN
ISSUED BY
THE HERBERT MORRIS
CRANE AND HOIST
COMPANY, LIMITED
NIAGARA FALLS, ONT.**



Brute Endurance
Is Built in Every

MAPLELEAF

You buy Giant stamina in your Mapleleaf Truck. 125% reserve strength is built in every part of Mapleleaf Trucks. Mapleleaf Trucks offer more value than do any other trucks.

Special Heavy Duty high-powered motor, disc-typed clutch and oversize Heavy Duty Axles.

If you want to cut your hauling expense down, see us, we can show you and prove it.

Mapleleaf Manufacturing Co., Ltd.
MONTREAL, CANADA

H. A. Moulton

President of the Moulton Manufacturing Company, Limited, Montreal.

The death of H. A. Moulton, president of the Moulton Manufacturing Company, Limited, is reported from Montreal. Mr. Moulton was born and educated in Stanstead, Quebec and for many years was a journalist, first on the staff of the *Montreal Witness*, and later as part owner of a paper in Coaticook, Quebec.

About 38 years ago Mr. Moulton and a partner went into the business of manufacturing dress trimmings. From the formation of the company till about a year ago he held the position of managing director and on the death of George M. Webster, succeeded him as president.

Mr. Moulton was active in every movement of the Montreal Branch of the C.M.A. toward the increase of Canadian trade and the betterment of Canada's industrial relations. In this latter connection an incident that took place some two months ago when the Moulton Company declared their annual dividend may be noted. The directors of the company at that time paid to all employees a dividend on their yearly earnings equal to that paid to bona fide stockholders. Mr. Moulton's employees and members of the Montreal Branch have felt his death very keenly.

William C. Edwards

Founder of W. C. Edwards Company, Limited, and Senator, Dies in Ottawa.

One of Canada's pioneer lumbermen and a prominent figure in political life for many years, passed away, when Senator William Cameron Edwards died at his home in Ottawa on September 17th, in his 78th year. Senator Edwards was probably best known throughout Canada for the outstanding part he played in the lumbering industry. Engaged in the lumbering business almost from his early youth, Senator Edwards was only 24 years of age when he launched the W. C. Edwards Company, Limited, at Rockland, 1868. He practically founded the town. Under Senator Edwards' able guidance, the business grew in leaps and bounds, and some years later the Senator established the big saw mills at New Edinburgh. The Rockland and Ottawa mills gave employment to several thousand men. Two years ago all the holdings of W. C. Edwards & Co., were acquired by the big Riordon merger, and the enterprises have since been operated under the name of the Gatineau Company. Senator Edwards was one of Canada's largest lumber manufacturers and biggest exporters of dressed lumber.

In 1882 Mr. Edwards was a candidate for the House of Commons in the constituency of Russell. He was defeated at that election, but was elected in 1891, and reelected in 1896 and 1900. On March 17th, 1903, he was summoned to the Senate.

Besides his connection with the lumber business, Senator Edwards was actively interested in many other Canadian industrial and business enterprises. He was one of the outstanding figures in the Canada Cement Company merger about twenty years ago, being its first president. He was also president of the Manufacturers' Lumber Company and the Library Bureau Company of Canada. He was a director of the Canadian Bank of Commerce, the Toronto General Trusts' Company, the Sovereign Life Insurance Company, and many other enterprises. He was a member of several clubs in Ottawa, Montreal and Toronto.

Voluntary Liquidation.

Canadian Cereal and Flour Mills, Limited, Are Offering Plants For Sale.

The Canadian Cereal and Flour Mills, Limited, with mills at Stratford, Galt, Ayr, Tillsonburg and other places, have gone into voluntary liquidation and the mills are being offered for sale. "The object of this," says the president of the concern, "is to readjust the business and place it on a more economic basis. Some of the mills are not bearing their fair share of the burden and these will be weeded out."

The president explained that the company had not made an assignment in that sense of the word, as there were no creditors other than himself and the bank. The business of the company is being conducted as usual.

Two Tanks—and the story behind them



IN your father's day the elevated tank was a wooden "tub" or a flat-bottom steel tank on a light steel tower. The former was necessarily a temporary affair, and the latter was uneconomical.

Then in 1892 came an invention which in downright practical improvement of an existing type of structure has never been surpassed. This was the hemispherical-bottom tank invented by Horace E. Horton. It was built with the stability of a skyscraper, the economy of a bridge, and the lasting qualities of steel itself. The Horton hemispherical-bottom tank gained almost immediate favor and since then thousands of the type shown in the left-hand picture have been built.

A few years later, George T. Horton, now president of the Horton Steel Works, Limited, brought out the Horton elliptical-bottom tank, which embodies all the good points of the hemispherical-bottom and possesses several important additional advantages.

Through these two inventions a means has been supplied for industrial plants, municipalities and isolated buildings to obtain reliable, economical water service and an unfailing supply of water for fire protection. The Horton tanks give 70 or 75 years of service without replacement of parts. They are secure against tornadoes, against fire, against dangerous deterioration, and against leaking. The large range of sizes makes them available for many purposes. They make the plant independent of temporary failures of water mains or pumps. They make adequate, sure water supply available to isolated mines and sheltered towns alike, to lumber mill and warehouse, to home and office, to farm and factory.

Water in its natural state is of little direct service to industry. It must first be harnessed or conducted or stored. The Horton tank is one of the great inventions which have made water economically available to public and commercial enterprises.

We shall be glad to show you how the Horton tanks can serve YOUR business or community.

Write to-day for full information on your requirements

HORTON STEEL WORKS

Formerly **CANADIAN CHICAGO BRIDGE & IRON COMPANY**

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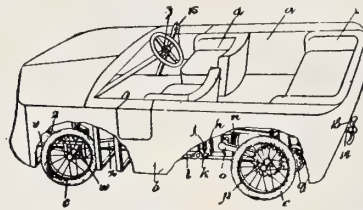
PATENTS FOR SALE

SAFETY DEVICE FOR ELEVATORS.



This invention relates to improvements in safety devices for elevators. An important object of my invention is to provide an improved safety device for elevators in which the elevator will be securely and positively locked to the guide rails when the supporting cable of the elevator breaks or does not serve to support the elevator whenever it is in danger of falling, irrespective of its position in the elevator shaft. Another object is to provide an improved safety device of simple and durable construction, and in which the locking means will be so constructed, arranged and actuated as to be positive and reliable in operation.

Canadian and United States patents for sale by Leon Courty, Windsor, Missouri, U.S.A.



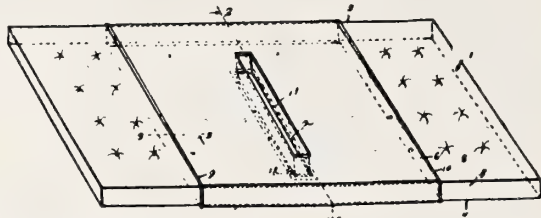
HYDRO AUTOMOBILE. This invention relates to a hydro automobile and consists of the combination of a suitable upper and lower frame, carrying wheels adjustably arranged with the said lower frame, means for locking and adjusting said wheels arranged in combination with the said frame, motive energy arranged in combination with the said frame, means for transmitting the driving energy from the motive energy to the said carrying wheels, a propeller shaft suitably journaled

in the said frame, said propeller shaft extending rearwardly with the said frame, a screw propeller fitted on the end of said propeller shaft, means for transmitting the motive energy to the said propeller shaft, a suitable body mounted on the said frame, said body being formed substantially in the design of the hull of a vessel. Canadian patent for sale. Write Max Johnson, c/o Morrow Beatty, Twin Falls, via Matheson, Ontario.



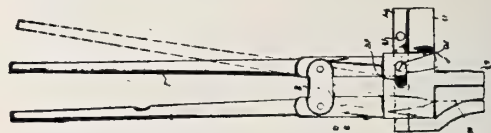
PADLOCK GUARD:

This invention relates to padlock guards and comprises a casing open at one edge and having a portion of its closed edge curved for conforming engagement with the shackle of the lock, the sides of said casing being provided with openings permitting the passage of a key therethrough and a slidable stud extending transversely of said casing at a point spaced from said curved wall. Apply to Mr. James E. Matthews, P. O. Box 311, Farrell, Penn., who has Canadian patent for sale.



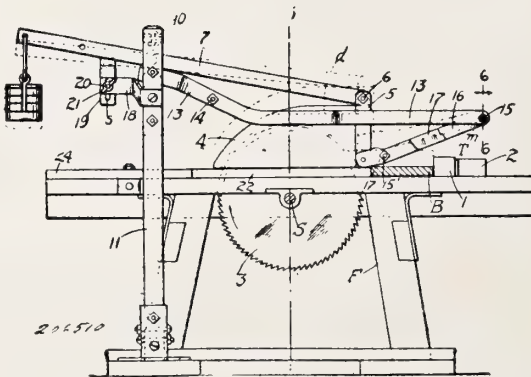
SANITARY MATTRESS. This invention relates to a sanitary mattress and includes a mattress body formed with an opening extending vertically therethrough, a waterproof tubular cover telescoped over the mattress body and formed with a transverse tube depending from the upper wall of the cover through said opening and forming a lining therefor, buttons on the outside of the lower wall of said cover and flaps extending outwardly from the lower edge of said tube provided with buttonholes for engaging said buttons to secure the lower edges of the tube in proper position to the mattress body. The inventor, Mr. Clarence S. Cooper, of Hondo, California, has Canadian and United States patents for sale.

carriage, and at the same time cover the otherwise exposed portions of the faces of the saw between the bed and bottom of the hood, and a stud or pin on the bed traversing the slot of the ejecting member for limiting in one direction the movement of the said member and of the carriage to which the member is secured. The inventor, George Wieland, 705 Wyoming St., St. Louis, Missouri, has Canadian patent rights on this invention for sale.



TONGS.

This invention relates to improvements in blacksmith's tongs, and the objects of the invention are to construct the tongs so that they will be adjustable and thus able to be used to grip small or large pieces of iron or other work being performed by the blacksmith, and to render the tongs strong and durable, yet light and easily handled. These tongs are also intended to cut down the expense by enabling one pair of tongs to perform work which usually requires a large range of tongs to handle, it also eliminates the liability of the tongs being lost because there will only be one pair where previously there would be many pairs for the same class of work. For details regarding the sale of Canadian patent, write Michael Rosehill, Lobley P.O., Alberta.



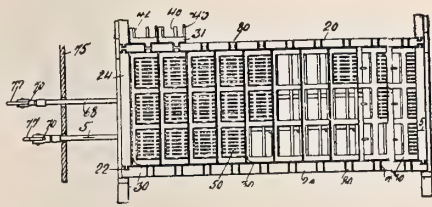
SAW GUARD. This invention relates to saw guards and consists in the combination with a supporting bed, of a rotary saw mounted thereon and extending above the plane of the bed, a vertically yielding casing or hood surrounding the portion of the saw above the bed and spaced from the bed, a reciprocable feed carriage, a slotted ejecting member coupled to the carriage and loosely embracing the faces of the saw, interposed between the bed and hood, one end of the slot of said member being closed, said member operating to force outwardly to a point beyond the saw edge, the section severed from the stock on the feed stroke, with a return stroke of the

SIGNS. This invention relates to improvements in signs and consists of a novel construction of using a casing, a mirror, and a sheet or set of sheets of cut-out blanks, through which only portions of the mirror can be seen, and such portions will show up to form the sign. The object of this invention is to provide a sign which is visible in the day time, and also very visible at night. A further object is to provide a sign having hinged locking members at its ends, which locking members are so formed that the plates of the sign cannot be removed unless the sign is disengaged from its fastened position. A further object is to provide a sign in which the letter sheet is formed of a series of individual sheets, each having its own distinct letter or figure cut out therein. A further object is to provide a sign where the letter sheet composes several units, which overlap each other in such a manner so that there will be no possible chance of misinterpreting a space between the units forming part of the letter or numeral. Canadian patent for sale. Further particulars of the invention can be had by writing Harold C. Shipman & Co., 131 Bank St., Ottawa, Canada.



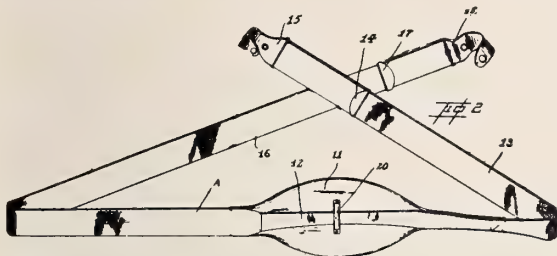
Harold C. Shipman & Co., Patent Attorneys, Ottawa, Canada

PATENTS FOR SALE---Continued

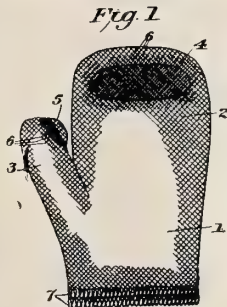


DUMPING GRATES. This invention relates to improvements in grates and consists of the combination of main side frames having sockets each with parallel sides and a curved lower bearing surface equal in diam-

eter to the distance between the walls of the sockets, other sockets with curved lower bearing surface of a greater diameter than the distance between the walls of the sockets, dumping frames, trunnions extending from the sides of the latter frames, and flattened surfaces on the trunnions to allow them to pass through the sockets having the enlarged curved bearing surfaces. Canadian patent for sale. Write Charles T. Coe, Marshville, Ontario.



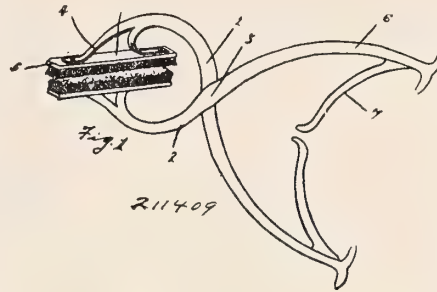
RUPTURE APPLIANCES. This invention relates to improvements in rupture appliances, and the objects of the invention are to construct the appliance so that it will readily fit ordinary sized persons, and capable of being used on either the right or left side, the appliance being self adjusting, to render the appliance unencumbrous, imperceptible in wearing, easily placed in position and removed, capable of being worn without inconvenience both day and night and whether at work or play. For particulars regarding the sale of Canadian patent rights, write the inventor, Prof. A. Leon Hatzan, 265 River Road, Niagara Falls, Ontario.



WOVEN WIRE MITTENS. This invention relates to hand-coverings or mittens, and has for its object, to provide an improved hand-covering to serve as a protection against heat and especially designed for use by bakers and domestics for removing hot vessels from ovens, without burning the hands. A further object is to provide improved means of additional protection near the ends of the fingers and thumb which come in direct contact with the heated vessel in grasping the same. Write Mrs. Clara P. DuBois, c/o Frederick V. Winters, 1133 Broadway, New York City, N.Y., U.S.A., for particulars regarding Canadian patent.

CUFF HOLDER. This invention relates to cuff holders and has for its primary object the provision of improved means for holding in normal position the cuffs of shirts, shirt-waists and similar articles of dress. Another object is the provision of an improved cuff holder by the use of which a cuff may be moved from the normal position on the wrist of the wearer without relative movement of adjustment between the holder and cuff and without the necessity of disconnection between parts of the holder. A further object is the provision of a novel form of cuff holder by means of which the cuff may be drawn from the wrist to a position about the thicker part of the wearer's arm, and held in such position without necessity for disconnection of parts of the holder or removal of the cuff from its encircling position about the arm. A still further object is the provision of a cuff holder embodying the above mentioned advantages and which shall be adjustable to accommodate it to cuffs of various sizes. Another object is to provide an improved form of cuff holder, adapted to hold in stiffly curved position the fold of the cuff of the ordinary soft shirt.

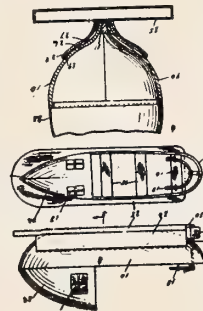
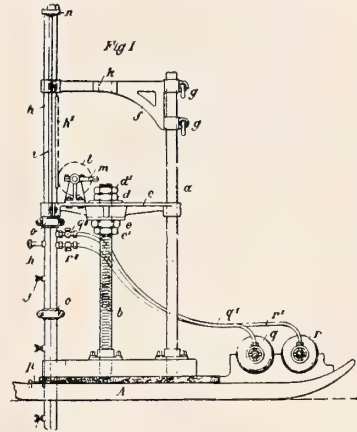
The inventor, Mr. M. A. Froney, M.D., 427-31 Baker Bldg., Racine, Wis., has Canadian and United States patents for sale.



HAIR BRUSH. This invention relates to improvements in hair brushes particularly adapted for use by ladies in brushing their hair. At the present time, ladies when performing their toilet, require to brush their hair first on the outside surface and then follow with a secondary operation brushing the hair

from underneath, and the present invention permits of these two operations being completed simultaneously, so that considerable time is saved besides which a better brushing of the hair is accomplished. Canadian and United States patents for sale. For full particulars write Edward Wellington, Port Coquitlam, B.C., Canada.

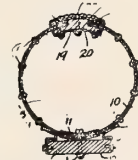
ICE CUTTER. This invention relates to an apparatus for rapidly cutting fields of ice or blocks of ice and comprises a plate having on its lower face two concentric hollow rings, converging jets in the said rings, means for feeding the outer ring with acetylene, means for feeding the inner ring with oxygen, ribs on the said lower face of the plate for protecting the jets, and a chain suspending the plate and adapted to operate it. Canadian patent rights for sale. Write Agenor Marchant, 30 rue Thiers, a Fourmies, Nord, France.



FEED BAG. This invention relates to improvements in a feed bag and comprises side bars having angular hooks at their corresponding ends, hooks and staples and hook rods carried by corresponding sides of the said bars, braces swivelly mounted to the opposite side of the said bars at the ends thereof opposite the said hooks, a central hinge connection for the said braces, a flexible receptacle secured to the side bars and braces and having a rectangular weighted bottom and a resilient neck band for the said container connected between the hooked ends of the said bars. Write the inventor, Peter Jasinski P. O. Box 2000, Welland, Ontario, for particulars regarding the sale of Canadian patent rights.

VEHICLE TIRE: This invention relates to vehicle tires and comprises a casing formed of a pair of coating sections substantially semi-circular in cross section, a tubular lining member formed of two sections and located within the casing, means for securing the edges of the sections of the tubular member and the casing sections together at the inner circumference of the tire, an annular plate located within the tubular member in the outer circumference of the tire and having a portion projecting between the edges of the sections of the tubular lining member and casing, strips carried by said plate having their ends looped over the tubular member and casing, a tread plate and means for securing the tread plate, the edges of the tubular lining member and the casing, the strips and annular plate together.

Write Mr. David H. Moore, Chattanooga, Tennessee, who has United States patent for sale.



Harold C. Shipman & Co., Patent Attorneys, Ottawa, Canada

Recent Industrial Fires

Shingle Mill Destroyed

Hunting-Merritt Plant at Warpole, B.C. Suffers Heavy Loss.

One of the largest shingle mills in British Columbia, the Hunting-Merritt plant at Marpole, was badly damaged by fire on August 6th. Eleven out of the fourteen shingle-making machines were totally destroyed and other machinery was badly injured. The plant is valued at \$300,000 and had a capacity of one million shingles a day. The fire loss is estimated at \$100,000, fully covered by insurance.

Roofing Plant Damaged

Pacific Roofing Company, Limited, Vancouver, Have \$4,000 Fire.

About \$4,000 loss was caused by a fire at the plant of the Pacific Roofing Company, Limited, Granville Island, Vancouver, on August 15th. The origin of the fire is supposed to have been an explosion of distillate which one of the workmen was pouring into an asphaltum tank. The blaze was confined to the main building and extinguished after a short fight.

Large Lumber Fire

Mason & Company Hose Mill and Stock in Fire at Thunder Bay.

Six hundred million feet of hardwood lumber, fifteen hundred cords of hardwood slabs, several hundred thousand broom handles and a barge loaded with lumber were burned when the saw-mill of Mason & Company, Thunder Bay, Ontario, was destroyed on August 31st. Besides the mill and the lumber the workmen's boarding house, the blacksmith shop, garage, oilhouse and docks went up in smoke.

It is estimated that there is enough hardwood in the neighborhood to keep a modern mill running for six years, so it is probable that Mason & Company will rebuild. Manley Chew of Midland and some Buffalo and Detroit firms are also involved in the loss. Seventy men were employed in the mill and yards.

Flax is Burned

Two Hundred Tons of Fibre, Valued at \$25,000, Destroyed at St. Mary's.

Two hundred tons of flax fibre valued at \$25,000 were burned in a fire that broke out at the St. Mary's Flax Company's Mill, St. Mary's, Ontario, on August 23rd. The mill itself was saved but a shed used for housing machinery and containing two wagons and several sets of sleighs, was burned to the ground. The loss is partly covered by insurance.

Another Flax Fire.

Milverton Flax Company Lose About 150 Tons of Unthreshed Flax.

A fire at Milverton, Ontario, on August 15th consumed six large stacks of unthreshed flax belonging to the Milverton Flax Company. There were some 150 tons of flax destroyed, valued at \$100 a ton. The mill and warehouses were saved.

A sawmill at Glennie, New Brunswick, owned by Clowes Brothers, was burned to the ground on August 26th. About a quarter of a million feet of lumber were also destroyed, causing a loss of about \$25,000. The mill had not been in operation this season.

The explosive plant in Deseronto that has been idle since the munitions activity died out, is being re-started. The factory was taken over by the Thompson Powder Co. Two Federal inspectors of explosives from Ottawa inspected the plant and a license was granted for the opening of the mill. Machinery and equipment were improved. A production of about six tons a day will be reached when the plant is operating at capacity.

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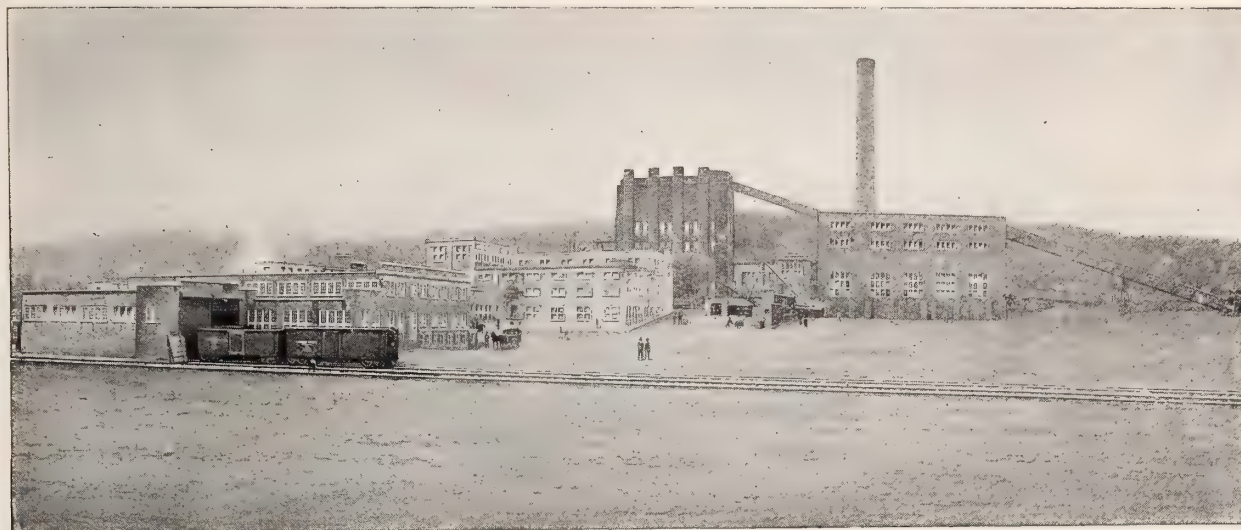
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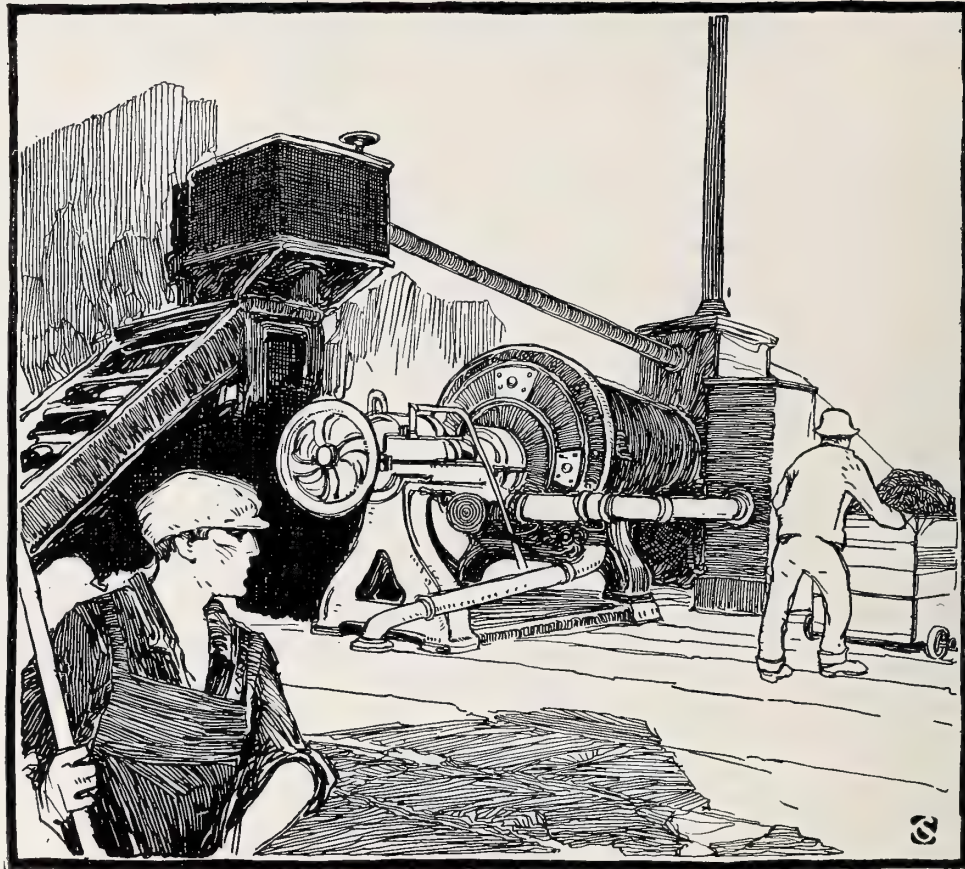
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OFFICE AND FINANCE

Making it Easy to Trace Materials

By L. E. DODD.

Reprinted from "Factory."

TO have a stock of material always in good condition ready for demands of the market, it is necessary that the records be complete and reliable. Furthermore, it is desirable to be able to state on short notice the amount and description of each lot of material present at a given time in the factory. This is not only for convenience in filling special and urgent orders, but also for the rapid making up of reports. Such reports include both those that are periodical and those made as special requests at unexpected times.

Provided careful records have been kept during every step of manufacture, these ends can be attained by frequent inventory of the stock itself. But the keeping of careful data by following each lot through every step of its working, which includes successive subdividing of a given lot, with the resulting complexity, is likely to be burdensome and a time-killer. Moreover, any commodity requires considerable time for the actual handling and counting which the usual inventory requires, not to mention the inconvenience.

Method of Keeping Records

A method of keeping records which I have worked out for an optical glass plant takes relatively a small amount of time. It assures an accurate tab on every pound of glass during the working and incidental handling from furnace room to stockroom. In addition it makes available at a moment's notice a complete description of a given lot of glass, whatever stage of manufacture it represents.

It is of course applicable to any commodity where the processes are complex, and detailed information on each lot of material is required at each stage, and particularly to a commodity which has to be subdivided one or more times during manufacture. Such specific information is required in plants having technical experts who require as much data as possible for a reliable basis for investigational work. Moreover, the present method provides numerical proof at hand of the relative economy furnished by a given way of treating the commodity at a given stage.

In optical glass working, after the melting has been finished, the processes include breaking (or cutting), trimming, molding, annealing, and inspection at different stages for various defects. The detailed information necessary for a complete description of the glass at any stage of manufacture includes melt number, kind of glass, number of pieces, weight, form, size, and information as to grading and annealing.

The present method requires a sufficient number of boxes in which the different lots of glass can be safely kept separate with a minimum of time and energy lost. One glass plant employs two sizes of wood boxes, several hundred of each size. Both sizes have the same horizontal section, 11 by 22½ inches, and 6¾ and 13½ inches high, respectively, all outside measurements. The material is ¾-inch white pine, put together with both nails and screws, and with an iron carrying handle at each end, so that a box is conveniently carried by either one or two persons. Soft wood like this is more easily worn away by contact with the sharp corners and edges of the glass, but it has the advantage of lightness. The wearing away of the wood is, however, not so rapid with optical glass, as the material requires careful handling throughout to avoid loss of valuable pieces by cracking or breaking.

The boxes are painted black and numbered serially with white numerals of large size stencilled on all four sides. While the black surfaces offer temptation to use white chalk on them to indicate the contents, any marking of the boxes themselves, except for the

serial numbers is absolutely taboo. Such marking has been found to cause confusion because of old marks unerased. Moreover, such marking does not help the appearance of the boxes. This may seem unimportant, but where the commodity requires care in the handling, the appearance of the factory's furnishings has a great deal to do with the morale of the workers as far as this pertains to responsible work. Instead of numbering all the boxes of both sizes serially throughout, the small size is referred to as the "S" series, which is itself numbered on the stencilled boxes and in the records.

This type of box is adapted both to use as a drawer in suitable shelving in the stockroom and for temporary stacking in the workrooms. The stacking of the boxes with stability of the piles assumes that they are never quite level full of glass, so that a box sets level on the one below. The Bureau uses shelving of the metal type in which two large boxes or four small ones occupy a compartment. The boxes are, of course, serially arranged on the shelves. Each box has its own space, which is left vacant when the box is absent from the stockroom.

It is well not to fill the larger boxes more than about half full of glass on account of its weight. This may raise the natural question of why have two sizes of boxes at all. But the large fragments are often irregular in shape, and these can be nested in the larger boxes without their protruding above the top.

The rapidity of release of the boxes through emptying of the contents depends obviously on the largeness and variety of stock desired, and the rate and manner in which glass of the different melts on hand is used up for cullet in new melts.

Card Forms are Used

The records themselves are kept entirely on card forms. These are of two sizes, 3 by 5 inches and 5 by 8 inches, and preferably of two colors. The large cards have their places in serial order in a card file and are the daily record (DR) cards. The small cards, or box slips, accompany the different lots of glass in the boxes. For each entry on the DR card there is a corresponding box slip. The reverse side of the DR card is utilized for remarks and for calling special attention to defects in a given lot of glass, such as may at times be found in a lot fresh from the molding.

Each DR card is numbered consecutively in ink, and has 15 lines, also numbered consecutively with numerals printed in with the form. Thus a "card entry number" (CE) consists of a card number and a line number, 17-12. Suppose that something is to be done to a box of glass. It may be, say, graded, or broken to weight for molding, or one or more pieces or pounds may be taken out of it perhaps for delivery. Whatever is done with it, an entry is made on the DR card on the same day. If it is merely transferred between the workrooms and the furnace room in connection with molding or annealing, or between workrooms and stockroom, only one line will be required for the entry. But if there is a division of the contents of a box, as occurs in grading, breaking to weight, trimming, or delivery of part of the glass from the box, there will be as many lines required on the DR card as there are separate lots into which the original lot of glass has been divided.

If the glass has been graded, there will be as many lines required as there are resulting grades. If the glass is broken to weight, two lines will be needed, one for the pieces of uniform size and one for the incidental fragments, or trimmings. All such separate line entries for a given box are placed on successive lines. Where part of the original lot is left in the box, or put back into the original

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box, as is the usual practise, the same box number is inserted in both columns, "From Box No." and "To Box No."

It is not necessary to insert, each time an entry is made having to do with the glass in a given box, all the descriptive details, for these can be obtained from previous entries, but it is desirable to insert all the descriptive items with each new line entry, and the time required is almost negligible. Where the entry takes up more than one line, ditto marks are rapidly used.

How the Box Slips Are Handled

Thus to each new lot of glass there is devoted a line on the DR card, and for every such line a box slip is filled out, bearing the CE, and this slip accompanies its own lot of glass. Essentially, this statement describes the method.

As to the box slip with the original lot of glass the treatment is for convenience as follows: Its reverse side is used for a temporary note of what was done with the glass, such as details of its transfer, or separate notes where the treatment of the glass results in its subdivision, with the new information necessary, such as pounds, grade, and number of box in which a new lot is placed. Any glass left in the original box can have its amount determined, obviously, by subtraction when the entries are made. However, actual weighing of all the new lots resulting from a given original lot serves as a check on the previous weight. It is then convenient to lay aside all such "original cards," or slips, until the end of the working day, when all entries can be made at one time and new box slips filled out and distributed to the proper boxes in the shortest time. The original slips are then destroyed.

In the column "Card Entry No." on the DR card the upper and lower halves of a given space are regarded as separate spaces. In the upper half, the "back reference" card entry number of the original box slip is recorded, and the lower half is reserved for the "advance reference," which consists of the CE number or numbers where the next entry having to do with that item is made, as 42-7, in case of a simple transfer of the box, or 42-7, 8, 9, where the original lot of glass is divided into three parts, each with its own new line entry. Thus a back reference has to do with but a single line, while an advance reference may include one or more line numbers. The same back reference number is inserted in each line of the new entry. Thus when a given line of the DR card contains both the back and the advance references that line is no longer part of the current record, although still useful for later tracing of the history of a piece of glass.

Where there is a line entry without a back reference it means that the particular lot of glass is being entered on the DR cards for the first time. A horizontal line drawn in the upper half of the CE space indicates the fact definitely. Similarly, when a given lot of glass is delivered there will be no advance reference, and a similar line is drawn in the lower half of the CE space.

All lines without advance reference numbers thus comprise the current record, and it is easy to see that either a report as to glass worked or delivered, during a given period, or a complete inventory of the entire stock can be made up rapidly by simply running over the DR cards in the file and noting those that have no advance reference card entry numbers. Thus, an accurate inventory as well as accurate reports are easy to make without any handling or direct reference to the glass stock itself.

If, with the lapse of time, some items become too much scattered through the DR cards, these can be readily copied consecutively on new cards, retaining, however, their original CE numbers, and these cards can then be grouped conveniently together. Such treatment is of course obvious.

A Complete Catalogue

A complete glass catalogue kept up to date by frequent revision, is essential in an optical glass plant. Only if the revision is frequent enough will the catalogue amount, as it should, to a continued inventory? The present method is adapted to furnishing suitable periodical reports for such frequent revision. The daily record cards themselves comprise a continual inventory, while the catalogue would contain the same information but in the specially desired form.

To conclude, the present system has been found advantageous in that items can be traced through several channels, such as the date, the melt number, the box numbers, and the card entry number. The latter is for this purpose probably most important. It is thus seen

that a given piece of glass is traceable as to its history back to the original melting pot; conversely, every pound of glass in a given melt can be accounted for as to its disposal. Errors in the records are not likely to go long undetected and are easily rectified. If a box slip becomes misplaced it is readily restored to place, as it bears its box number. If a box slip disappears entirely, a new one is made out from the daily record entry without loss of a complete description of the glass.

The method insures a complete description, with certainty of identification, of the commodity at all stages of its manufacture.

This description is always and at once available for any given piece of glass, and its complete history can be quickly learned. Reports of any kind can be made rapidly and accurately. A continual inventory of the glass stock is afforded. The method facilitates cost accounting. Finally, the method furnishes a simple and rapid means of keeping full and reliable information on a given lot of the commodity during processes of manufacture that are complex.

Massey-Harris Statement

Company Issues Statement in Explanation of Closing Down of Plants

In connection with the closing down of their plants, the Massey-Harris Co. issued a statement in explanation, which read in part as follows: "Our company, in common with all others dealing with the farming community, has been greatly affected by the sudden and heavy drop in the value of farm produce. The farmer, not knowing all the conditions, has had the feeling, perhaps quite naturally, that manufactured articles should drop correspondingly in price with his produce. Such has not been the case, and this has prevented buying in some instances where it would be to his advantage to do so, even at present prices. We are quite sympathetic with the policy that he should buy only what he really needs under and made our plans accordingly. We did feel, however, for all existing circumstances. We did not expect normal sales in 1921, the difference there was in the price of implements this year, and the probable price next year, that no farmer could afford to put off the buying of an implement really needed, because the difference in price, spread over the life of the implement, would not amount to much. The bulk of the cost of the goods is quite outside our control, and while a great deal of labor is involved in the cost, it comes to us in the form of materials. Such reductions in material costs as took place within our manufacturing season, came too late to be of any help. The farmers, as all other consumers, are perfectly justified in demanding a reduction in the cost of manufactured articles, but this cannot come so abruptly as in the case of the drop in the value of farm produce, because the channels through which it comes are so extended that it takes more time to make adjustments. Wages must come down, but great hardship would be caused by too sudden a drop, and we think the consumer should recognize this and give labor time to adjust itself to the new conditions. Freight rates are very big items in cost, and there has been no adjustment along this line yet."

Wabasso Cotton Company

Profits Are Decreased, But a Balance is Left After Meeting All Charges.

Profits of the Wabasso Cotton Company, Limited, Three Rivers, Quebec, for the year ended June 30, showed a shrinkage when compared with those of the two previous years, but they provided for all dividend and bond interest charges, a deduction of \$100,000 for depreciation, which is the same as that allowed in 1919 and 1920, and left a balance of \$143,102 to be carried over to net surplus.

During the year the shares of the company were increased by the issuance of two shares of no par value in exchange for every \$100 par value share.

The report shows total profits of \$386,697, as compared with \$443,709 in the previous year. Net profits were \$283 102, which compare with \$336 015 in 1920.

The general statement of assets and liabilities shows an excess of current assets over current liabilities. Current assets amount to \$1,363,541 as compared with \$2,051,702 and current liabilities stand at \$495,410 as compared with \$1,211,332 at the end of the previous year.



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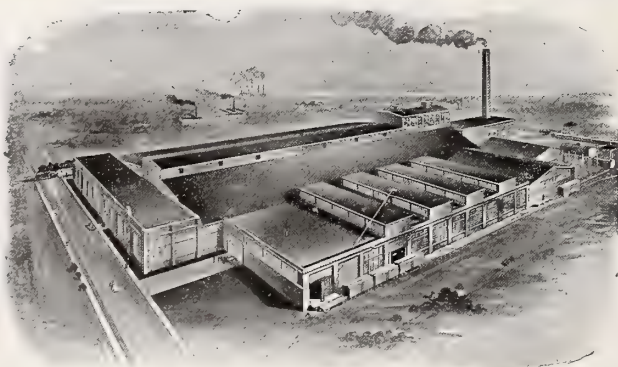
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A Favorable Statement

Laurentide Company, Limited, Issue Report for the Year Ended June 30th

The annual statement of the Laurentide Company, Limited, was issued on September 2nd and, according to President Chahoon, it is the strongest and most favorable report ever presented by the company. As the figures cover the year ended June 30th, 1921, and as the previous statement was for only six months, comparisons are difficult, but the year's profits after allowances for taxes, depreciation and depletion, stand at \$4,515,928. After payment of interest and all other charges and dividends at 6 per cent., the surplus for the year was \$2,787,928. A reserve of \$2,000,000 has been set aside for possible depreciation of inventories. The company have no bonded indebtedness or preferred stock, and their loans from the bank of \$5,067,945 are covered by investments of \$5,071,855 from which income of \$319,637 was earned during the year.

After deducting from the fixed assets a reserve for depreciation and depletion of \$1,133,293, the working account shows the gross profit for the year \$6,724,032. A further reserve is made for taxes and additional depreciation and depletion amounting to \$1,322,843, and also \$855,260 for interest and other charges, making in all \$2,208,104, leaving net profits of \$4,515,928. From this amount deduct dividend of 6 per cent., \$1,728,000, leaving surplus for the year of \$2,787,928. Out of this amount a special reserve has been set up of \$2,000,000 for possible reduction of the inventories, leaving the surplus \$787,928, which, added to last year's surplus of \$637,538, makes balance carried forward of \$1,423,467.

The capital account has been increased by \$3,473,755, which represents the cost of the two new machines and additions and a considerable increase in the company's timber limits.

Merger is Completed

Clarke Brothers Paper Mills, Limited, Amalgamated With Parent Plant

At the annual general meeting of Clarke Brothers, Limited, held at Bear River, Nova Scotia, on September 1st the proposal to amalgamate the subsidiary company, Clarke Brothers' Paper Mills, Limited, with the parent concern was unanimously adopted. Immediately following the annual general meeting a special general meeting was held to ratify a by-law authorizing an issue of 02,000,000 worth of 7 per cent. fifteen-year bonds. Of this issue, \$1,000,000 will be set aside for the refunding of the original bond issue of \$1,000,000 of the parent company; \$230,000 as security for payment in full or on account of a mortgage held by the Nova Scotia Trust Company; \$270,000 to take up the amount of bonds issued by Clarke Bros. Paper Mills, Ltd., and the remaining \$500,000 to be held in the Treasury.

The new Company will operate under the name of Clarke Brothers, Limited, and will have a capital of \$1,500,000 common stock and bonds of \$2,000,000 First Mortgage 7 per cent. fifteen-year. Among the products of the two companies are sulphite pulp, kraft board, fibre board, shipping cases, clothes pins and wood products. The bulk of the business is export, which is facilitated by the company's shipping situation on the Atlantic Coast, augmented by its own steamship line, repair yard and drydock.

Officers were elected as follows: W. G. Clarke, chairman and treasurer; W. W. Clarke, secretary; F. W. Fraser, St. John; Charles T. Stark, Toronto; Harry L. Stark, Toronto; Alexander Fasken, Toronto and A. G. MacIntyre, Bear River, directors.

Management is Changed

Whalen Pulp and Paper Company, Limited, to Run Their Own Mills

An important change in the management of the Whalen Pulp & Paper Company, Limited, Vancouver, is announced. The arrangement in force for the past eight months, by which the Reliance Mill & Trading Company took charge of production, has now been terminated and the Whalen Company will run their own mills. The wood fibre plant of the company has been re-opened, employing about three hundred men.

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Canada's Industrial Expansion

A RECORD OF PROGRESS

Are Now Manufacturing

President of the Cosgrave Export Brewery Company, Limited Issues Statement.

Announcement is made by the management of the Cosgrave Export Brewery Company, Limited, who were organized some months ago, that manufacturing operations commenced on August 23rd. There had been many enquiries as to the delay in getting under way and a statement just issued by the president, J. F. Cosgrave, is to enlighten the shareholders on that point. He says:

"Your Board of Directors take pleasure in announcing that the Cosgrave Export Brewery Company commenced operations on the 23rd of August, and are now manufacturing ales, porter, convalescent stout and half and half, both temperance and full strength beers.

"During the past four months the technical staff have been supervising the installation of the latest and most up-to-date brewing equipment to augment the already high standard of equipment and plant embraced in your properties, and we can now confidently state that the Cosgrave Export Brewery is one of the most thoroughly equipped and modern plants in the Dominion of Canada.

"Our products will be on the local Ontario market by October 1 and negotiations have been practically completed with a well known former wholesale liquor merchant of Montreal, to represent the company in Quebec and all territory east of Ontario.

"Your board of directors have further made all the necessary arrangements for distribution of the company's products in foreign markets as soon as the trade outlook in these countries warrant it, which, our correspondents inform us, is improving rapidly.

"In conclusion, your board of directors beg to state that the outlook is most favorable and that the shareholders may look forward with the utmost confidence in the management and successful administration of the company's properties, and to steadily growing and profitable business."

New Sulphite Mill

Howard Smith Paper Mills, Limited, Build and Operate Extensive Plant

The plant illustrated on this page is the new sulphite mill which the Howard Smith Paper Mills, Limited, have built and are operating at Cornwall, Ontario. It is an addition to the old plant of the Toronto Paper Company, which has been operating since 1888. When this company and the Howard Smith Company were merged one of the first moves was to prepare plans for the erection of a new sulphite mill on a large scale with a capacity several times as great as the original mill. The result is this plant, the main building of which is 30 x 80 feet, 110 feet high and contains four digesters, with a capacity of 70 tons of bleached pulp a day.

One of the digesters was built by the Dominion Bridge Company, Limited, and completed by them at their works in Lachine, Quebec. The other three were shipped in sections and assembled in the plant.

The old pulp mill at Cornwall is being fitted up for the Bellmer bleaching process and will be completed shortly. It is intended that all the mills controlled by the Howard Smith Company will be supplied with sulphite pulp from the Cornwall plant. A new plant is almost completed for the manufacture of chlorine for bleaching, and this will also supply the other Howard Smith mills.

A new steam boiler house has been erected with a stack 200 feet high that makes it a conspicuous feature of the landscape. It contains a complete equipment of boilers, all fitted up with the latest devices for the saving of labor and economizing expense in every way.

For the moving of the heavy machinery and materials, the company have a locomotive crane of 15 tons capacity, which has rendered much easier the construction of the buildings and their contents, and will be of great service in subsequent operations.

The immense piles of pulp wood which occupy a large area give one a good idea of the magnitude of the operations of the new plant. These piles aggregate about 20,000 cords, and are diminished at the rate of about 140 cords a day, representing the product of 10 or 12 acres of forest.

The aggregate daily product of the mills controlled by the Howard Smith Company at Cornwall, Ontario, and Beauharnois and Crabtree, Quebec, is now 120 tons. In Cornwall the working force numbers about 400 men and women.

New Chemical Company

Triangle Chemical Company of New Westminster, Will Establish Factory.

The Triangle Chemical Company, recently incorporated at New Westminster, British Columbia, have leased a site on the North Arm of the Fraser River and will establish a plant there at a cost of about \$50,000. The company will manufacture sulphuric and muriatic acid, super-phosphate and a full line of chemical fertilizers. They will also deal in all materials from which standard fertilizers can be made.

Resume Operations

Two Companies Re-open Their Factories at Woodstock, Ont.

The re-opening of two factories which have been closed for some time, has enlivened the industrial activity of Woodstock, Ontario. Hay & Company resumed operations with a large number of hands and the Canada Furniture Manufacturers, Limited, have re-opened their chair factory.



New Sulphite Mill of Howard Smith Paper Mills, Limited, at Cornwall, Ontario

Preston Company Sold **Canadian Brill Company, Limited, to Operate Car and Coach Factory**

The Canadian Brill Company, Limited, have been formed as a subsidiary of the J. G. Brill Company of Philadelphia to take over and operate the plant of the Preston Car & Coach Company, Limited, Preston, Ontario. Operations are starting immediately with a substantial volume of business on hand, including orders from Toronto, Winnipeg and the Temiskaming & Northern Ontario Railway.

Samuel M. Curwen, of Philadelphia, president of the United States company and all subsidiaries, is president of the new company; H. K. Hauck, Cleveland, first vice-president; A. N. W. Clare, Preston, second vice-president. H. D. Scully continues as a director and general manager. Another Canadian director and two from the United States are still to be appointed.

Increasing Output

Beach Furniture, Limited, of Cornwall Return to Fifty-five Hour Week.

The Beach Furniture, Limited, of Cornwall, Ontario, after working 40 hours a week all summer have now gone on a new schedule of 55 hours, a ten-hour day for five days and 5 hours on Saturday. The management state that prospects look bright and they have recently opened warehouses in Western Canada and the United States.

Will Make Trucks

International Harvester Company of Canada, Limited, Add New Product to Their Line.

Announcement is made at Hamilton, Ontario, by the International Harvester Company of Canada, Ltd., that their Chatham works are being equipped to take over the manufacture of International motor trucks. The first size go into immediate production will be their model "S" Speed Truck. These trucks have heretofore been made in the United States, and shipped into the Dominion, but the volume of business, it is stated, has grown in such rapidly increasing

proportions that business judgment dictated some centrally located Canadian city. Chatham was selected because it is the home of the large wagon and sleigh factory of the Harvester Company, where McCormick, Deering and Chatham wagons and sleighs have been built for many years; therefore, it was felt by the officers of the company that Chatham presented the ideal location for this addition to the Canadian product.

Canadian Dyes, Limited

Operations Commenced in Plant at Trenton, Ontario in August.

Canadian Dyes, Limited, commenced operations at Trenton, Ontario, in August, employing a force of eight men. They are now manufacturing aniline dyestuffs at the rate of 1000 pounds a day, the capacity of the plant being 5 tons.

The building in which the company are manufacturing is 113 x 89 feet, 36 feet high with granite walls and cement floors. The company are organized under a Provincial charter with a capital of \$50,000. C. R. Wright is president and general manager, D. R. Stoneleigh, secretary-treasurer and D. H. Rice, vice-president. The other directors are: Dr. Charles E. McLaughlin of Halifax and T. Blake Farrell, of Toronto.

To Make Trucks

Organization of Adanac Motor Corporation, Lachine, Quebec, Being Completed.

The organization of the Adanac Motor Corporation, Limited, Lachine, Quebec, is being completed. The company are securing a federal charter with an authorized capital of \$50,000, and have associated with them some successful business men and practical automotive engineers. Their first product will be a two-ton truck which is a patented device made to operate on a standard Ford chassis. It will have a worm drive of gears completely enclosed with 34x5 inch solid tires in the rear and 30x3½ inch pneumatic in front. During their first season the company do not expect to machine their own parts but will assemble the units.

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For More Space Install Steel Shelving

In the factory, the shop, or the plant where more space is required, Dennisteel Shelving should be installed. It provides a place for materials, finished products, etc. that offers safety from fire and loss.

For years we have been making steel shelving for many of the leading industrial plants of Canada—that's why we have specialized in this line.



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PART I.—Night.

The night-worker—and a carelessly-tossed cigarette.

PART II.—Later.

A flicker—a sudden flare—then flame. Dense smoke from the second storey window. In goes an alarm—and the helmeted rubber-coats are on the job.

PART III.—The Aftermath.

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"Fire-Wall" Filing Cabinets are a pledge of better protection for business records. More than the rugged strength of steel commends them—for steel alone conducts heat. In "Fire-Walls" a curtain of asbestos, between two sturdy steel walls, stands between your vital business records and the sorry aftermath of fire's visitation.

"Fire-Wall" means an increased "margin of safety" for your records. Consider this when buying your equipment.

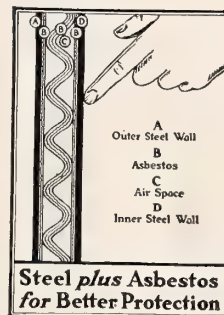
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Chemical Products, Limited

Mammoth Plant at Trenton, Ontario, Replaces Burned Munitions Factory

Cleaning up the wreckage of the Imperial Munitions plant at Trenton, Ontario, and turning the equipment into a peace-time business were the problems that confronted the firm of Chemical Products, Limited. It is gratifying to record that these problems have been met in a satisfactory manner, the success being largely due to the efforts of A. H. C. Heitman, general manager, who had to bear the practical burdens of plant construction.

Chemical Products, Limited, are really an enlargement and re-organization of the company formerly operating in Toronto, known as Chemical Products of Canada, Limited. They were organized in 1916 for the manufacture of various products at that time unobtainable in the Dominion. The limited facilities for operating in Toronto necessitated a change to a better location and the enlargement and re-organization was made with a view to acquiring the plant and property of the British Chemical Company at Trenton.

Equipment for the production of aspirin, phenacetins, sal ammoniac, etc., was shipped from the Toronto plant to Trenton, where it is now awaiting operation. The problem at the Trenton plant was to provide an outlet for the large possible production of sulphuric acid. To this end every effort of the Company has been directed.

Trenton occupies an advantageous position, midway between Montreal and Toronto on the Bay of Quinte. It is the terminal of the Trent Valley Canal, and is served by three trunk railway lines so that these facilities could not be better. The property consists of 257 acres of land bounded by the Trent River on the west, the Grand Trunk Railway on the north and the Canadian Pacific Railway on the south, and is situated outside the residential district of the municipality of Trenton. The company propose to assist in the location of suitable industries on their property, as they have ample siding, power, water and office facilities already available. If their plans in this regard develop, Trenton should become a very important Canadian chemical centre.

The close proximity of hydro power to the plant assures a constant supply of electrical energy. Special power lines lead directly

from the Hydro plant a short distance up the river to the property. The current is received at 6,600 volts and is distributed from a main receiving station through transformers which bring it down to 440 volts for use in the various plants. There is thus practically no transmission of low voltages over long distances.

The plant consists of 58 fire-proof buildings, covering about half a million square feet of floor space. There is about 30 000 feet of roadway throughout the area. The principal plant is the large sulphuric acid chamber plant, consisting of two units capable of producing 120 tons of 60° acid a day. They are equipped with pyrite lump burners and Glen Falls brimstone burners.

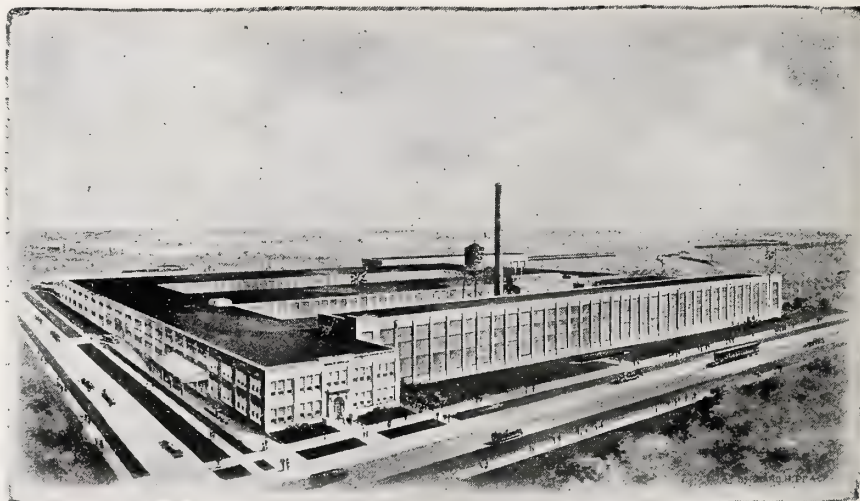
The acid plant is of steel and brick construction, absolutely fire-proof. The pyrite burners consist of 72 kilns, 6 ft. 6 in. x 4 ft. 4 in. grate for burning lump pyrites. The Glen Falls burners are the rotary type, 48 in. in diameter by 20 feet long, and will burn over 30,000 pounds of sulphur a day.

The burner rooms are 80 x 220 feet, the tower room of brick 40 x 80 feet, and 120 feet high and the chamber rooms 50 x 360 feet. They are all of excellent steel construction with monitor running full length over the plant. They are asbestos protected and metal covered.

The Concentrator Plant, in which the 60° acid from the above mentioned units is concentrated to 66° acid, is contained in a small steel building, covered, like the acid units mentioned above, with asbestos protected corrugated metal, and is 60 ft. wide by 230 ft. long, 60 ft. in height, and especially designed to suit the equipment necessary. The equipment in this building consists of eight concentrating units of a modified Scogging type.

The fertilizer plant is a new installation and is under construction at the present time. It is hoped that it will be ready for operation within a few weeks. It consists of three units, viz.: a car-unloading shed and rock storage building, 120 x 78 feet, built of British Columbia fir covered with corrugated metal; a brick building 60 x 80 feet and 85 feet high, to contain rock milling machinery, air separating devices, elevators conveyors, acid tanks, etc., necessary for handling the ground rock which is to be treated with sulphuric acid; and a large steel structure, 120 x 430 feet with corrugated metal

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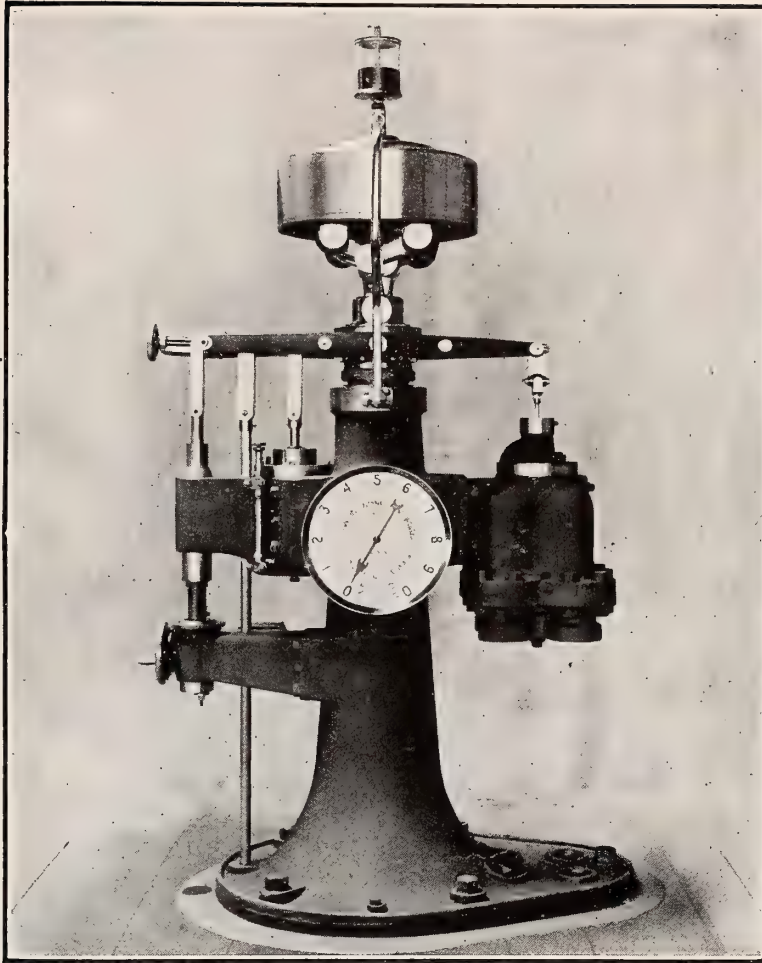
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OUR steel stamping department, with its batteries of heavy presses and other special equipment; its corps of specially trained mechanical engineers, die-makers and skilled operators, offers you a really efficient service on steel stampings of every size. If you have a stamping problem that is worrying you, or are contemplating new economies by using stampings instead of forgings, write us. We will give your enquiry prompt and careful attention. Also manufacturers of Metal Culverts, Metal Ceilings and Walls, Metal Roofing and Siding, "Rib Fabric," Steelcrete," etc.

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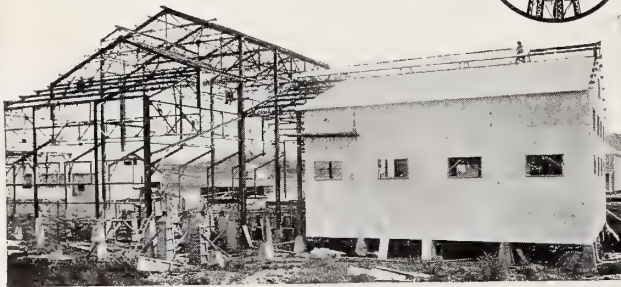
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sides and roof of mill type construction. In the latter building is located the equipment necessary for mixing the ground rock with sulphuric acid, the handling of acidulated phosphate rock and the shipping of the same.

Some of the minor plants such as those for the manufacture of aspirin and other products are about ready for operation. In addition to the above it is proposed to build, in the immediate future, a sodium nitrate plant and a plant for sintering pyrite ore.

Capital expenditures on the development have been large, amounting to at least half a million dollars, but everything has been done to utilize equipment and material already on the ground. The whole project is probably the most successful single chemical undertaking instituted in Canada since the war.

New Canadian Product

Canada Paper Box Company, Limited, Montreal, to Make Paper Barrels

A new Canadian product that is to be manufactured by the Canada Paper Box Company, Limited, Montreal, is the paper barrel. They are now at work on the installation of the necessary machinery in their plant at 1000 Cristophe Colomb Avenue and hope to be ready for production early in November.

In an address to the Rotary Club of Montreal, on August 16th, Art Harries, president and manager of the Canada Paper Box Company outlined the method of making the barrels. His description is as follows:—

"The mode of manufacture of the paper barrel is very simple, one machine making the body in one piece, somewhat similar to the spiral mailing tube, except in the barrel while the paper overlaps it does not criss-cross.

"The raw material is 18 to 20 point Testboard in rolls of 6 to 12 inches wide as may be required. Steel mandrels of the same diameter of the barrel to be made, split in two parts are placed in position on the machine, the paper in rolls is passed over a silicate roll to get the adhesive and then split in half by a rotary knife. The paper is then fed on to the mandrel, and four, six, eight or ten ply is wound on to give the edge the strength that may be required, when a right and left hand worm is brought into operation, that draws the two sections of the mandrel apart, thus the paper overlaps a quarter to three quarters of an inch apart, until the mandrels have separated to the length desired for the barrel, when the slitting knife is thrown out of action, and the full width of the paper is wound around as many times as may be required, thus making the bilge. When this is cut off, the body of the barrel is completed.

"The machine is equipped with stops and gauges so that when properly set the operations I have explained are all automatic. Tops and bottoms of wood or metal are inserted according to the use the barrel is to be put. I acknowledge we have at present at least to rely on wood and metal for tops and bottoms, but the paper part of the barrel is what makes it the satisfactory container."

Some of the advantages claimed for the paper barrel are cleanliness, lightness and strength. They can be made light or heavy, thick or thin, to suit the load and service required.

Addition at Belleville

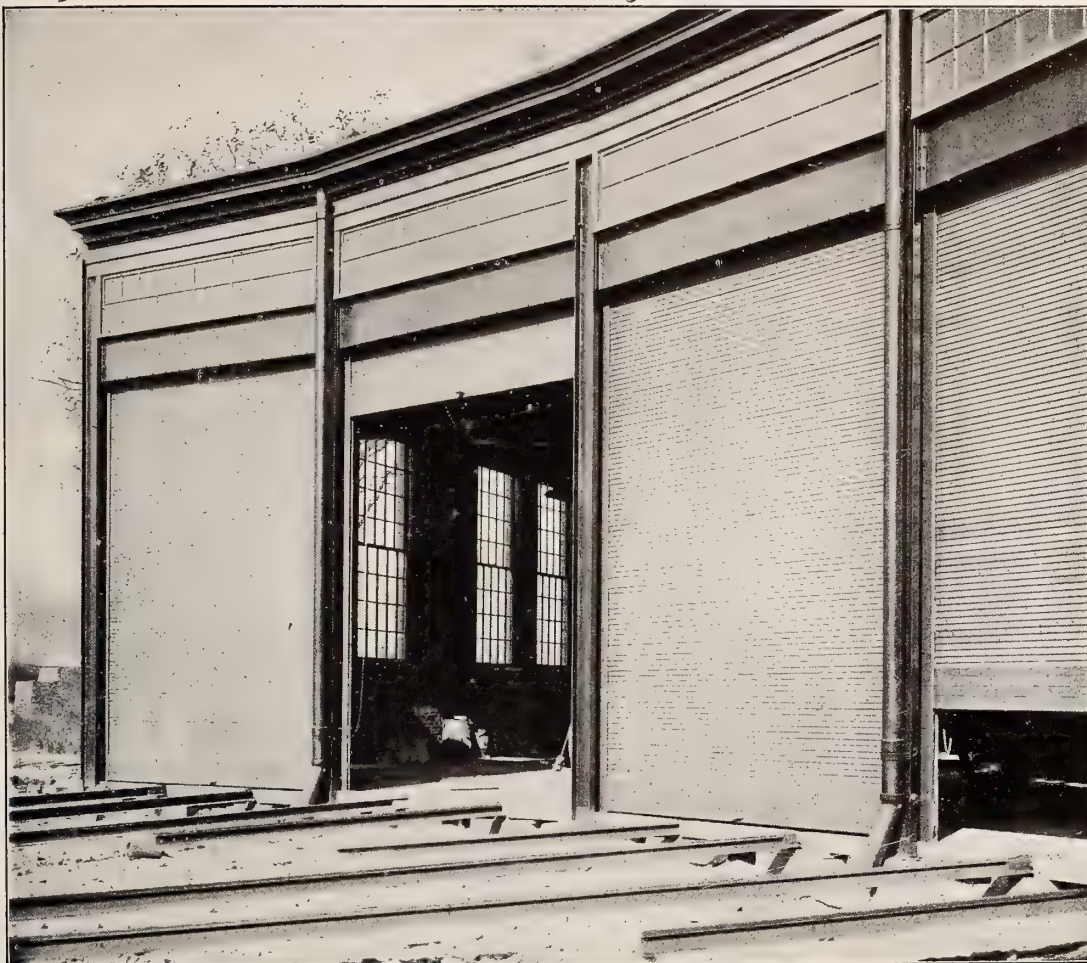
Springer Lock Manufacturing Company's New Building Will Double Output.

An addition to the plant of the Springer Lock Manufacturing Company, Limited, manufacturers of builders' hardware at Belleville, Ontario, is now under way and should be completed about the end of October. The building is a two-storey structure, 87 x 49 feet, with concrete foundations, brick walls and steel sash.

The lower floor of the addition will be used for the extension of the machine shop and the upper floor principally for stock. While this extension does not double the floor space of the factory it balances up the rest of the plant and will facilitate manufacturing operations to such an extent that the company's output will be doubled. The estimated cost of the building is about \$10 000.

The Office Specialty Manufacturing Company, Limited, announce the opening of a fully-equipped branch service store in the City of Quebec, at 8 St. Joseph Street. J. L. Vézina of Quebec, has been appointed manager of the new branch.

Ormsby



Unusual Fire Door Needs

There are spots around your plant where the doors are awkward, where they take up valuable space, where the space behind gets filled with debris that will some day cause spontaneous combustion.

The solution to this is THE ORMSBY ROLLING STEEL DOOR. No matter what the condition is, it fits in.

It is the most economical door made as regards space, taking up a few inches on either side and from 12" to 15" above.

Huge as these doors are, a very light pull on the chain raises or lowers them. Springs counter-balance the load.

They can be used anywhere to protect shipping exits, elevator shafts, openings in partition walls, any opening that allows no room for sliding or swinging doors. They are operated by hand, by chain, and by motor. They are sturdily built and in smaller sizes bear the FIRE UNDERWRITERS' LABEL.

We would like to send you prints, prices and also the names of a few of the many concerns who have had these doors in constant use for many years. We know you will like and get long service from THE ORMSBY ROLLING FIRE DOORS.

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OTTAWA—Canada Engineering & Construction Company

In this plant nine 823 H.P. boilers are equipped with 'A-C' Stokers of 8 retorts each. Originally 7 boilers were equipped; later stokers for two more boilers were ordered.

Jones "A-C" Stokers

minimize coal cost

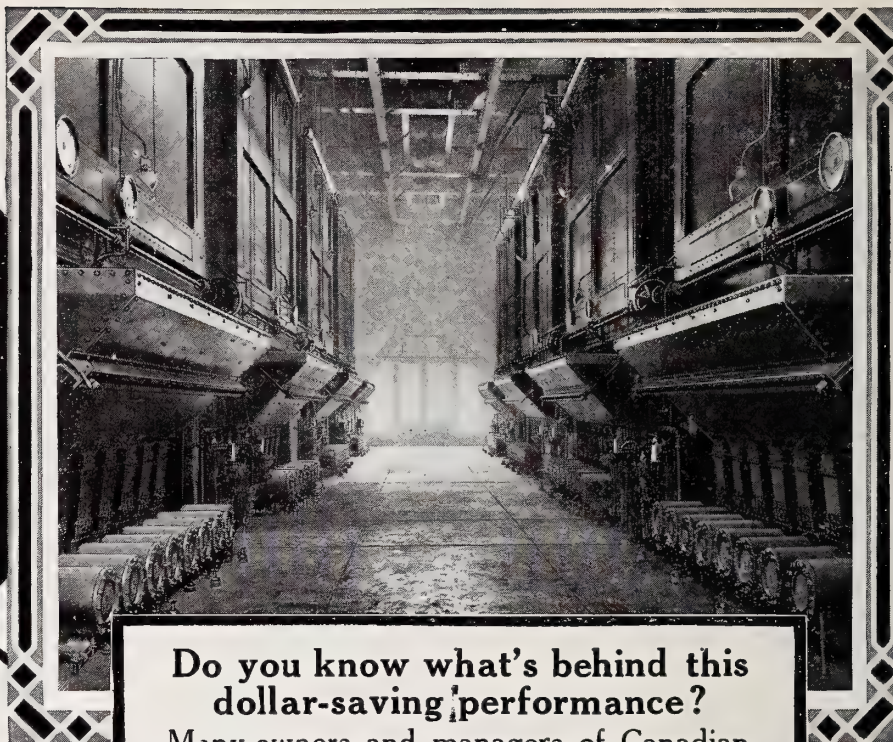
Jones "A-C" Stokers cut coal costs in two ways—by burning less coal, and by burning cheaper coal. The full value of the Jones under-feed principle is realized by: automatic control of fuel and air, large capacity retorts, absence of clinker on side and bridge walls, mechanical (not gravity) feed, and "automatic-cleaning."

give greater capacity

Capacity is a prime requisite of high-duty stoking. Jones "A-C" retorts hold a big fuel reserve for quick pick-up. Elimination of ignition arches permits hard driving. Individual control of retorts provides for emergency load conditions. Automatic air and fuel regulation insures high efficiency while carrying heavy overloads.

cut labor cost

The simplicity of the Jones "A-C", and the automatic regulation, minimizes operating labor. "Automatic-cleaning" reduces working of fires. The rugged simplicity cuts repairs and the labor necessary for making repairs. The simple balanced dump plate eliminates high-maintenance complications. There are no working parts in the fire. This also minimizes repairs.



Do you know what's behind this dollar-saving performance?

Many owners and managers of Canadian plants are inclined to be skeptical about the reports brought to their attention showing the big saving of Jones "A-C" Stokers in certain plants.

They claim the other plant's problem is not their problem. But in taking this stand they are overlooking the fact that these records of economical performance are claimed to be nothing more than dollar and cents evidence that Jones "A-C" Stokers are basically right in *design and construction*.

Right there is the point!

If Management will study the *cause*—stoker principles and stoker construction—instead of the *effect*—fuel, labor and money saved—they will know Jones "A-C" records are not freak records made under highly favorable conditions, but are *average* records that can be duplicated in any plant equipped with 'A-C' Stokers.

Go beneath the surface. Find out *why* the many records of Jones economy are possible—and your skepticism will vanish.

A good way to do this is by reading the not-to-technical description of Jones betterments: "Ten points of Jones Superiority." Where shall we mail your copy?



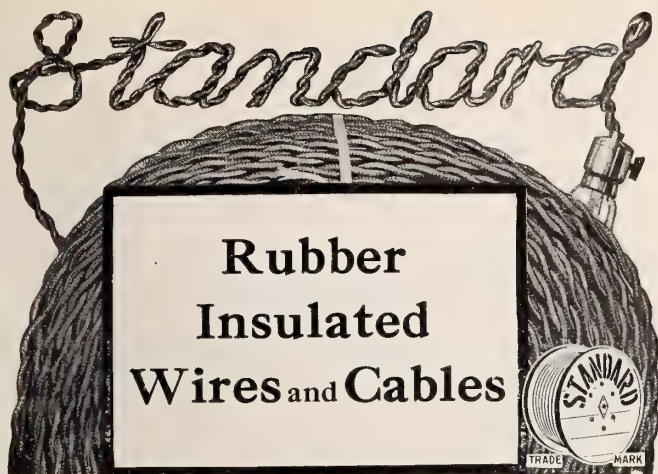
Jones Stokers are made in Canada by Canadians and sold for Canadian money at par. The old-established Jones Under-Feed Stoker Company, Ltd., has recently been re-organized as the Under-Feed Stoker Co. of Canada, Ltd., and the re-organization makes available for Canadian Power users the extensive engineering resources of the Under-Feed Stoker Co. of America.

The Under-Feed Stoker Co. of Canada, Ltd.
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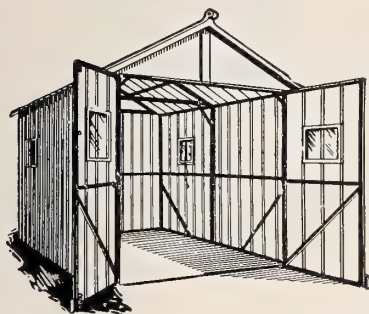
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purpose requiring an economical fire-
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Manufacturers

TORONTO

WINNIPEG

Busy Year Expected

Graham's, Limited, Have Received Several Large Export Orders.

Graham's Limited of Belleville, states the Kingston *Standard*, are beginning the fall season with every prospect of one of the busiest years in the history of this evaporating firm. They are now starting operations in ten of their plants in Nova Scotia, to handle the apple crop. In ten other factories, in Ontario and in British Columbia, the company is about to begin evaporating. The company has received a number of large orders from France, Holland and Great Britain. These will keep the factories going for a long time, and will give employment to a large number of hands.

New Sugar Company

Headquarters of Peninsular Sugar Company, Limited, Are at Chatham, Ontario

Announcement has been made by the Chamber of Commerce at Chatham, Ontario, that the headquarters of the Peninsular Sugar Company, Limited, capitalized at \$2,000,000, will be established there. The plant will probably be erected within a short distance of the city. A. D. McLean, of Toronto is president of the new organization and F. H. Hubbard, Ottawa, Ohio, general manager. J. L. Dougherty, formerly district agricultural representative at Chatham, is treasurer and assistant manager. H. J. French, president of the Ontario Beet Growers' Association, Lee O'Neill, vice-president of the same, and Henry Gilroy have been appointed directors.

Addition at Kincardine

Circle-Bar Knitting Company, Limited, Erect Office and Storage Building

A new concrete, brick and steel building, which the Circle-Bar Knitting Company, Limited, are adding to their plant at Kincardine, Ontario, will be ready for occupation about December 1st. Its estimated cost is \$15,000 and it will be used for storage and office. The company are also adding some additional equipment to their Owen Sound mill.

Service Lamp Company

Now Manufacturing Electric Incandescent Lamps at London, Ontario

R. Herschman, F. Daputo and N. Sicconi have formed a partnership at London, Ontario, and are operating under the firm name of the Service Lamp Company, with an invested capital of about \$20,000. Their products include all types of electric incandescent lamps. Manufacturing commenced on August 15th in a plant with some 10,000 square feet of floor space. At present they have about twenty employees but expect eventually to increase this number to over one hundred.

Secure Large Order

I. X. L. Manufacturing Company, Harriston, Ontario, Making Car Doors.

The I. X. L. Manufacturing Company, Harriston, Ontario, have secured a contract for the manufacture of 6,000 car doors for the Pagat Car Co-operative Company, of Buffalo. These doors will be used by all United States railroads carrying grain out of Buffalo. Work has begun on the contract which is to be completed by November 1st. A staff of forty men is now busy on the work.

Ship First Product

W. W. Powell Company, Nelson, B.C., Running Plant at About One-third Capacity.

The match block factory recently completed by the W. W. Powell Company, at Nelson, British Columbia, has shipped its first product. The plant is now running at about one-third capacity, its total capacity being 15 million feet per season. The industry employs twenty-five hands and controls the white pine output for several miles. The match blocks are sold in Eastern Canada and in the United States.

To Make Silos

The Hoard Company Organized at Port Alberni, British Columbia.

The Hoard Company, formed at Port Alberni, British Columbia, will manufacture silos of a new type. The product is eight-sided and no bolts or iron bands are used in its construction, but the planks are dovetailed into each other. The manufacturers claim that they will not get out of shape through swelling or shrinkage. Equipment has been installed to turn out 1,500 silos a year, and it is hoped to find markets for the product in Canada, Australia, New Zealand and the United States.

New Automobile Plant

Leaside Munitions Plant Acquired for Canadian Branch of Durant Motor Car Company

The Leaside Munitions Plant outside Toronto, which was completed just at the close of the war, and has remained unoccupied ever since, has been bought by W. C. Durant, head of the Durant Motor Car Company, for a Canadian branch factory. The buildings now on the property are to be utilized, and new ones are to be erected at once, with a view to having the plant producing by next March.

Mr. Durant proposes to manufacture every important part of the car in Canada, including electrical equipment and tires. A wood-working plant is to be constructed on the property for the manufacture of the bodies of the cars. The main building now on the property is 130 by 640 feet, and will form one of the units of a series of structures which will constitute the Durant manufacturing plant, and will be used as a machine shop, wherein all motors, axles and transmissions for the Canadian company will be made. The building program also calls for the construction of a three-story assembly plant, 130 by 160 feet, directly to the rear of the present building.

Good Business Year

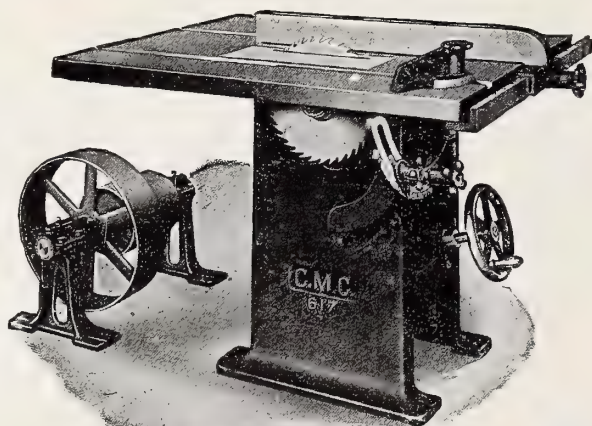
Whalen Pulp and Paper Mills, Limited, Vancouver, Show Increased Profits

Indications of a good business year for the Whalen Pulp & Paper Mills, Ltd., operating in British Columbia, are found in the report for the year ended February 28, 1921, submitted to the shareholders at Vancouver. Operating profits were \$1,208,854, compared with \$878,549, last year, and, after deduction of taxes and charges and writing down log inventories, but before depreciation, there was net profit of \$530,603, compared with \$323,757. Current assets show a small surplus over current liabilities, but the position in this regard has materially improved since a year ago. Current assets now stand at \$2,017,865, against \$1,152,747 last year, and current liabilities are \$1,919,118, against \$2,184,424 last year. Inventories have risen to \$1,725,042, against \$1,003,080. Current liabilities include an obligation to the Bank of Nova Scotia of \$925,000, whereas the debt to bankers a year ago was \$1,330,178. There is an item of accrued wages this year, amounting to \$111,987, and another of accrued interest on bonds, debentures and notes, \$139,875, compared with \$98,333 last year. The company's investments remain unchanged at \$20,000 in Victory bonds. Property assets are entered at \$16,976,053, against \$15,455,074 last year. Total assets are \$19,657,663, against \$16,818,608.

President T. W. McGarry reports that during the year \$858,735 was spent on capital improvements, being chiefly the completion of work commenced in the previous year and the improvement of power conditions at the Port Alice plant. The sum of \$100,000 of 6 per cent. first mortgage and refunding gold bonds and \$100,000 gold notes were retired during the year, and the sinking fund provision for retirement of gold notes increased by \$88,354.

The comparative production by the Whalen Company for the past three years was as follows:

	1921	1920	1919
Pulp (tons).....	51,731	47,962	41,814
Lumber (M feet).....	8,423	12,731	20,081
Boxes (M feet).....	536	1,493	1896
Shingles.....	53,824	61,198	49,190



No. 617 Variety Saw

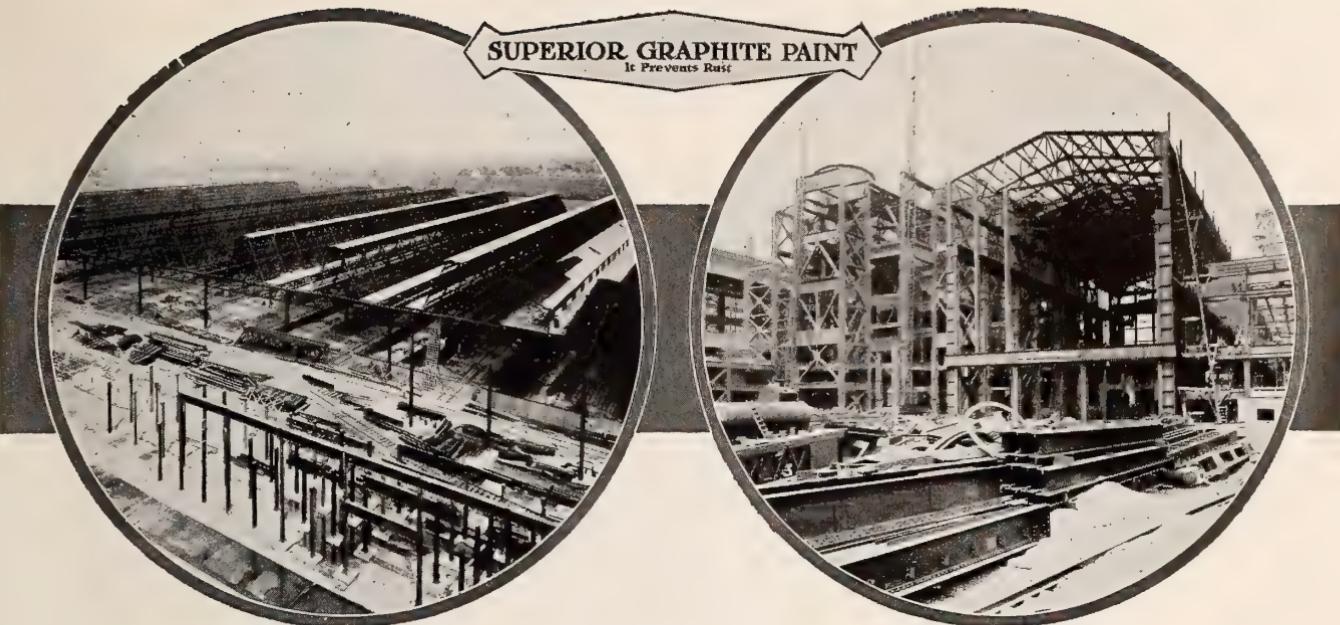
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The Pulse of Business in Canada

Bank Clearings

Only Six Canadian Cities Show Increases, Total Decline Being 16 Per Cent.

Canadian bank clearings for the month of August show a total decline of \$244,261,978, or 15.9 per cent. Out of twenty-seven cities reporting, six show increases, of which the largest is that of Moncton, at 90.5 per cent. The only other city in Eastern Canada to show an increase was Windsor, where clearings were up \$30,000 over the same month last year, or 2 per cent. In the western division, the four cities to display gains were Edmonton, at 4.3 per cent., Lethbridge at 2.2, Brandon at 26.06, and Saskatoon at 35.02 per cent.

Total eastern clearings receded \$215,810,158, or 18.5 per cent., the decrease at Toronto being 8.4 per cent., and that of Montreal 25.7 per cent. The total decline in the West was \$28,451,820, or 7.7 per cent. Winnipeg's decrease amounted to \$6,679,084, or 3.6 per cent., and Vancouver's to \$13,391,657, or 17.8 per cent.

The following table shows the clearings for the month with comparisons:—

Eastern Bank Clearings			
	1921	Increase	P. C.
Toronto.....	\$371,967,490	x\$31,223,944	8.4
Montreal.....	428,570,828	x148,368,858	25.7
Ottawa.....	27,026,163	x5,981,850	18.1
Hamilton.....	22,745,184	x7,525,513	24.8
Quebec.....	24,803,325	x1,895,292	16.4
Halifax.....	14,727,255	x5,826,158	28.3
St. John.....	11,851,592	x4,153,087	25.9
London.....	11,308,361	x3,570,554	23.9
Windsor.....	13,889,156	30,000	.2
Brantford.....	4,273,167	x1,502,028	26.009
Sherbrooke.....	5,009,051	x662,135	11.6
Kitchener.....	3,970,279	x865,724	17.9
Peterboro.....	3,280,962	x483,840	12.8
Moncton.....	4,670,556	2,218,825	90.5
Total.....	\$918,093,369	x\$215,810,158	18.5

Western Bank Clearings			
	1921	Increase	P. C.
Winnipeg.....	\$178,302,483	x\$ 6,679,084	3.6
Vancouver.....	61,466,583	x13,391,657	17.8
Calgary.....	24,017,889	x6,417,080	21.08
Edmonton.....	22,719,054	951,908	4.3
Regina.....	14,382,078	x2,786,236	16.2
Victoria.....	10,132,351	x1,011,836	9.07
Saskatoon.....	6,550,691	2,294,253	35.02
Moose Jaw.....	6,125,480	x1,076,261	14.9
Lethbridge.....	3,680,526	80,295	2.2
Fort William.....	3,083,012	442,786	12.5
Brandon.....	3,891,453	804,638	26.06
New Westminster.....	2,536,772	x 526,381	17.1
Medicine Hat.....	1,594,335	x251,593	13.6
Total.....	\$338,482,707	x\$28,451,820	7.7
Total East.....	948,093,369	215,810,158	18.5
Grand Total.....	\$1,286,576,076	x\$244,261,978	15.9
x—Decrease			

Pulp and Paper

July Exports as Compared With Last Year Show
a Heavy Decline

July returns on exports of pulp and paper from Canada, as given out by the Canadian Pulp and Paper Association, continue to reflect the depression of the market for these commodities. There are, however, indications that the near future will witness improvement.

The July exports of paper, pulp and pulpwood reached a total value of \$9,661,595 as compared with \$8,687,504 the preceding month and with \$17,560,653 for July 1920. Exports of newsprint paper amounted to 1,146,362 cwt. valued at \$5,539,623, compared with 847,604 cwt. valued at \$4,295,181 the preceding month and with 1,219,439 cwt. valued at \$5,727,193 in July last year. The chief discrepancy is shown in wood pulp. Exports for July this year paper amounted to 1,146,362 cwt., valued at \$5,539,623, compared with 648,885 cwt., valued at \$2,225,425, the preceding month and with 1,893,461 cwt. valued at \$9,137,733 in July, 1920.

During the month, 80,835 cords of pulpwood, valued at \$995,039 were reported to the United States. The amount exported in July, 1920, was 144,741 cords, valued at \$1,545,906.

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Building Conditions

Large Increase in Value of the Contracts Awarded During August

Construction activity in August according to figures published by MacLean Building Reports, Limited, shows a tremendous increase over July. Contracts to the value of \$36,307,200 were awarded as compared with \$17,741,400 in July, an increase of over 100%. This is by far the largest monthly aggregate since August, 1914, and is contributed to by the different Provinces as follows:

	No. of Projects	Value
Ontario.....	908	\$20,355,700
Quebec.....	382	4,933,800
Manitoba.....	174	6,907,600
British Columbia.....	210	1,320,800
Nova Scotia.....	42	892,000
Saskatchewan.....	70	703,300
Alberta.....	71	684,300
New Brunswick.....	23	477,700
Prince Edward Island.....	7	32,000
Total for Dominion.....	1886	\$36,307,200

Pig-iron and Ferro-alloys.

Production Increased During July by More Than Two Thousand Tons.

The total output of pig iron and ferro-alloys during July showed an increase of more than two thousand tons over the production reported by the Dominion Bureau of Statistics for June. Pig iron output remained steady at slightly over fifty-four thousand tons, but the production of the several grades varied considerably from the amounts reported for the preceding month. Basic iron declined from 48,870 long tons in June to 40,720 tons in July, all of which was produced by the makers for their own use. Foundry iron which showed a total of 5,214 tons in June was nearly double, at 10,339 tons in July. Of this amount 9,135 tons was used by the makers, and the balance, 1,204 tons, was produced for sale. The ratio of foundry iron produced for use to the amount made for sale was, therefore, eight to one in July, while in the preceding month the ratio was one to five. There was a marked increase in the production of malleable iron during the month, the output rising from 661 tons made in June for sale, to 2,922 tons made during July for the use of the producing firms. Electric iron castings showed an advance over the previous month's record, the figures for the two

months being 67 tons in June and 105 tons in July. Of the entire output of pig iron over 90 per cent. was reported as having been made for the further use of the companies producing.

The production of spiegeleisen was resumed in July and a total of 2,830 long tons was made for further use.

Other ferro-alloys, consisting entirely of the several grades of ferro-silicon amounted to 659 tons during the month, all of which was made in electric furnaces and produced for sale.

There were no changes during the month in the number of blast furnaces active, the six furnaces reported in blast at the end of June being kept in operation throughout the month. At the close of the month, therefore, six furnaces were active, namely, three at Sault Ste. Marie, one at Hamilton and two at Sydney.

Cost of Living

Average Weekly Budget in August Shows Slight Increase Over Previous Month.

The average price of the weekly budget for a family of five in sixty Canadian cities rose to \$11.41 at the beginning of August, as compared with \$10.96 at the beginning of July, according to figures compiled by the Department of Labor. This covers 29 staple foods, and an examination of the different items shows that practically the entire increase is accounted for by potatoes and butter.

The total budget for food, fuel and rent is \$21.95, totalling slightly more than in July, when it was \$21.53. In August of 1920 the figure was \$26.60. In August, 1914, the same articles cost \$14.46. The decrease in cost of foods since June, 1920, to levels lower than have been experienced since 1916, have been practically offset by increase in fuel and rent. Incomplete returns as to retail prices of clothing, etc., indicate that the cost of all items for an average family in the cities in July and August was still approximately 60 per cent. above 1913 levels.

In wholesale prices the departmental index number for August showed little change at 236.4, as compared 238.6 for July, 330.2 for August, 1920; 301.1 for August, 1919; 284.3 for August, 1918, and 136.3 for August, 1914. The index number (100) is for the average price of 271 commodities covering the 10-year period, 1890-99.

A Fire Pail

That Will Never Rust or Leak

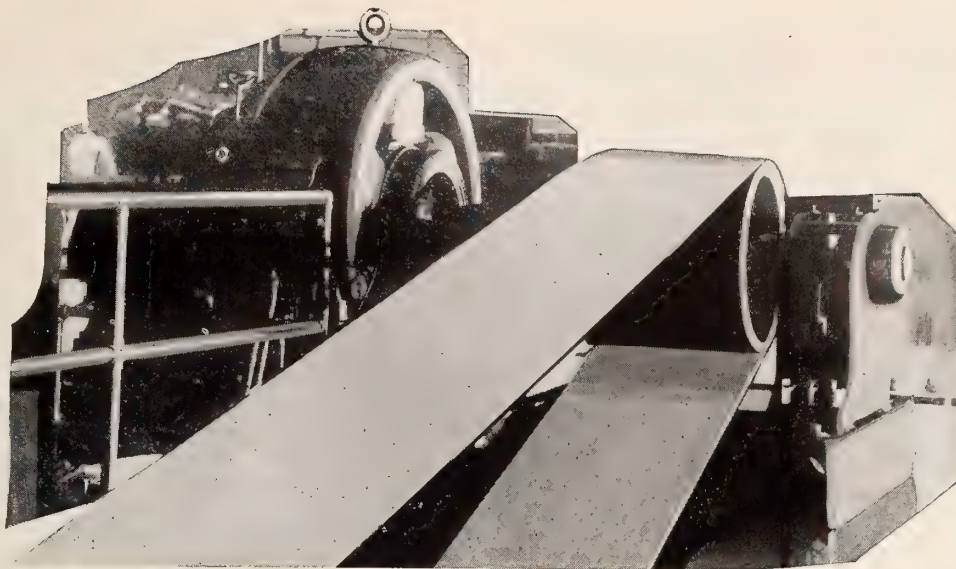
Made of Indurated Fibreware (which is wood pulp) moulded, pressed and baked under terrific heat into a one-piece pail without hoop, seam or joint, light as wood and strong as steel—that's the Eddy Fire Pail.

A Fire Pail that is leak proof, rust proof and bulge proof. A Pail that is always "on the job" because its rounded bottom necessitates its being placed in a rack or on a hook—it will not stand alone.

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Hose

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Water: "Indestructible," "Para," "Kushion Kover," "Star."
Suction: "Para," "Star," "Trade."
Garden: "Canadian," "Dominion."

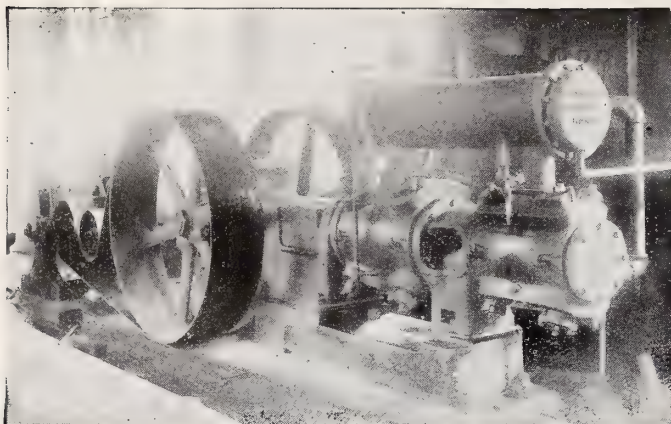
Packing

Sheet: "Join-Tite," "Star," "Importers."
Rod: "Cabestos," "Valve-Bestos," "Canadian."
Valves: "Montreal," "Commercial," "Canadian."

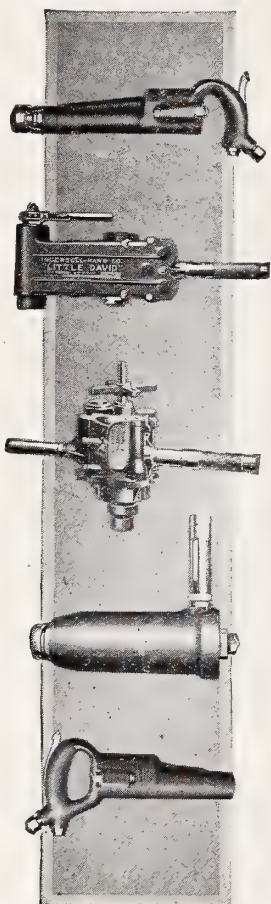
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Steel Ingots and Castings

Output During July Lower Than in June by About Two Thousand Tons.

While the output of steel ingots and castings during the month of July was still almost 4,000 tons in excess of the monthly average for the seven months of the current year, the actual output was about 10,000 tons lower than the quantity produced during the preceding month. The principal decline was in the production of steel ingots which dropped from 62,339 tons in June to 52,641 tons in July. Practically all the steel made during the month was basic open hearth, 52,111 tons being produced by the makers for their own further use. In addition to this amount four tons of converter steel and 446 tons of electric steel was made and used. The total output of steel ingots made for sale amounted to only 160 tons during the month. The production of basic open hearth steel castings during July was nearly double that of the previous month, the actual output amounting to 630 tons as compared with 389 tons in the preceding month. The ratio of the production for use to the production for sale was maintained and the quantities produced were 185 tons of basic open hearth steel castings made for use and 445 tons for sale.

Electric steel production declined 1 278 tons in June to 608 tons in the current month. Of the latter amount 277 tons was produced for further use and 331 tons for sale.

Converter steel castings produced during the month, amounted to 99 tons, all but 10 tons of which was made for sale.

From the foregoing it will be seen that the output of direct steel castings of all kinds amounted to a total of 1,337 tons during July, a decline of more than 400 tons from the 1,764 tons produced in June. Of the 1,337 tons reported, 865 tons was made for sale and 472 tons was used by the producers. The average monthly production for the seven months ending July of the current year was 50,000 tons. The output for the past three months, it will be noted, has been in excess of the average monthly production for this year to date.

The Employment Situation

Little Increase in Volume of Employment During Two Weeks Ended August 13th

Employment during the two-week period ended August 13th was practically stationary as shown by the Bulletin of the Employment Service of Canada. The general trend of the employment curve has been upward since the beginning of April, but the movement has been fluctuating, and the volume of employment still continues on the mid-winter level.

For the fortnight ended August 13th, reports from 5 139 firms show 642,062 workers employed. The same firms had reported 638,635 persons on their payrolls for the two weeks ended July 30th. The index number for the two weeks ended August 13th is 89.0 as compared with 88.9 the previous fortnight. For the corresponding period last year it was 107.9.

Railway Earnings

C. P. R. Decrease Operating Expenses and Increase Net Earnings During July

During the month of July the C.P.R. suffered a reduction in gross earnings as compared with July, 1920, but operating expenses were decreased so much that an increase is shown in the net earnings. The comparison of earnings for July, 1920 and 1921 is as follows:—

	July 1921	July 1920	Change
Gross earnings.....	\$15,772,929	\$17,375,760	\$1,602,831
Net earnings.....	2,054,315	1,619,485	434,830

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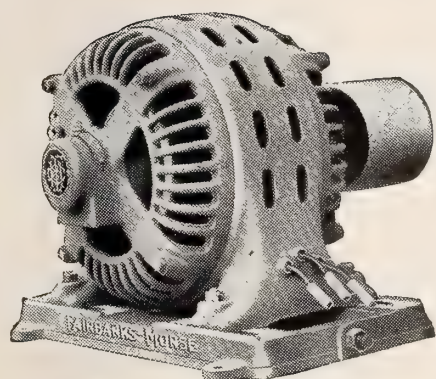
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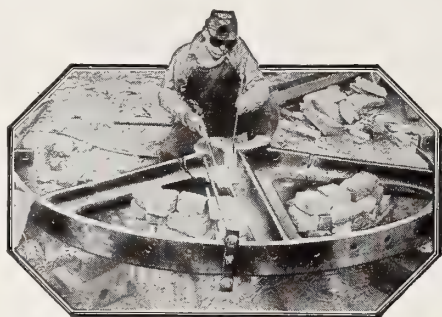
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P.W.C. 527

Trade Returns

Great Decline in Canadian Trade During August Shown by Department of Customs Figures

A decline in the total of Canadian trade during August, affecting both imports and exports, is shown by the summary issued by the Department of Customs. Almost every item shows a great increase when compared with the figures for August, 1920. In fibres, textiles and textile products the downward trend is particularly marked, imports to the value of \$12,659,038 in August, 1921, comparing with \$28,590,352 in August, 1920. Imports of iron, steel and manufactures thereof of which last August amounted to over twenty-four million dollars have decreased to a value of a little more than nine and one-half millions. Following are the complete figures with comparisons:—

	IMPORTS ENTERED FOR HOME CONSUMPTION Month of August			
	1920		1921	
	Free	Dutiable	Free	Dutiable
Agricultural and vegetable products, mainly foods....	\$ 4,141,891	\$12,627,239	\$ 2,421,852	\$ 8,796,552
Agricultural and vegetable products, other than foods.....	2,588,254	3,137,521	1,904,760	1,852,091
Animals and animal products.....	2,120,404	2,550,146	1,606,842	2,245,433
Fibres, textiles and textile products.....	10,000,264	18,590,088	4,373,215	8,285,823
Chemicals and chemical products.....	1,775,145	1,955,394	644,072	1,154,197
Iron and steel, and manufactures thereof.....	4,615,649	19,974,896	1,190,092	8,531,831
Ores, metal and metal manufactures, other than iron and steel.....	1,264,176	3,935,496	456,069	1,959,966
Non-metallic minerals, and products.....	9,189,876	13,589,732	6,554,255	5,985,918
Wood, wood products, paper and manufactures	2,733,215	3,160,284	1,184,094	1,867,624
Miscellaneous.....	2,947,006	3,421,338	1,901,147	2,321,468
Total.....	\$41,375,880	\$82,942,134	\$22,236,398	\$42,910,903
Duty collected.....		\$16,990,804		\$10,452,208

	EXPORTS Month of August			
	1920		1921	
	Domestic	Foreign	Domestic	Foreign
Agricultural and vegetable products, mainly foods....	\$28,065,382	\$116,356	\$19,306,501	\$82,237
Agricultural and vegetable products, other than foods.....	1,904,981	14,109	619,177	25,246
Animals and animal products.....	21,232,920	120,588	15,865,591	84,913
Fibres, textiles, and textile products.....	1,395,008	203,708	297,606	83,492
Chemicals and chemical products.....	1,853,753	24,774	517,261	18,999
Iron and steel and manufactures thereof.....	7,544,480	587,399	1,631,933	286,407
Ores, metals and metal manufactures, other than iron and steel.....	4,649,157	43,014	2,029,662	58,682
Non-metallic minerals, and products.....	5,754,664	68,064	2,385,670	32,561
Wood, wood products, paper and manufactures	31,817,127	27,845	16,512,887	23,133
Miscellaneous.....	8,060,592	283,474	2,319,705	181,335
Total.....	\$112,278,064	\$1,489,331	\$61,485,993	\$ 877,005

The plant of the McKinnon Industries, Limited, at St. Catharines, Ontario, has re-opened after a short shut-down, with several hundred workmen. The working force will probably be increased before long.

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In an effort to place before your notice all the equipment we market we have carefully compiled a new catalog entitled "Hotel and Institutional Kitchen Equipment." You will find it interesting reading, illustrating as it does many new labor and time-saving machines. A copy of the catalog awaits your written request. There is only a limited quantity for distribution; if you are interested, let us hear from you promptly.

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Book Reviews

Trade With South-East Europe

The Trade of the New Countries of South-east Europe; by L. D. Wilgress, Canadian Government Trade Commissioner. Ottawa, 1921, the King's Printer.

This publication, issued as a supplement to the *Weekly Bulletin* of the Department of Trade and Commerce, contains a valuable summary of conditions in the Balkan countries. Roumania, Hungary, Austria, Turkey, the new Republic of Czecho-Slovakia and the Union of Yugoslavia are carefully discussed from the point of view of the prospective trader. As a prefatory note explains, the material for the book was collected before the present period of trade depression. At present little business can be transacted in this part of the world, but there are possibilities for future trade, and as normal conditions are restored Mr. Wilgress' survey will be found very useful.

Booklet on Toronto

Municipal Hand-Book, City of Toronto, 1921. Compiled by the city clerk. Toronto: Caswell Co., Limited.

The annual appearance of this neat little pocket-size handbook has become a regular and welcome event. It condenses into brief and serviceable form all the information and statistics about Toronto, from the municipal standpoint, that could be desired, and is a model in this respect. The history of Toronto in compact form appears in this series of handbooks and much credit is due to W. A. Littlejohn, the City Clerk, for the thoroughness with which the work of compilation is done.

The Mackenzie Basin

A Synopsis of the National Resources of the MacKenzie District. Ottawa: Natural Resources Intelligence Branch, Department of the Interior.

The purpose of this pamphlet is stated to be to give a synopsis of the resources of that portion of the MacKenzie Rier Basin north of the Province of Alberta. In its preparation the reports of the federal and provincial governments have been freely used. In a few cases information has been secured from unofficial sources. The report deals with geology and topography, climate, population, trading posts, missions and schools, police, agriculture, timber, minerals, fauna, transportation and water power.

A Provincial Year Book

Statistical Year Book of Quebec, 1920. Bureau of Statistics, Provincial Secretary's Department, Quebec.

The seventh edition of this useful work of reference resembles the previous editions as regards arrangement and divisions. Statistics of almost every form of progress are given, including manufacturing, agriculture, education, economic development, import and export trade, etc. In most cases the statistics of industries do not go beyond the year 1918 and so do not give an exact representation of present conditions. An especially interesting section is that devoted to the growth and development of the organized labor movement in the province.

A Newspaper Directory

The Canadian Newspaper Directory, 1921. A. McKim, Limited, Montreal, Toronto, Winnipeg, Hamilton and London, England. Price \$3.

This is the fourteenth edition of a work of reference that is extremely useful to all advertisers. It contains a complete list of all newspapers and periodicals published in the Dominion of Canada and Newfoundland with full particulars as to circulation, publication dates, size of page, etc. In addition a summary of information about each town in which papers are published is given. A supplement contains market survey maps, showing towns in which newspapers are published.

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The Mineral Industry

The Mineral Industry of the British Empire and Foreign Countries. London, 1921, H. M. Stationery Office, Imperial House, Kingsway, W. C. 2. Price 3s.

This work, issued for the Imperial Mineral Resources Bureau, is a statistical summary of production, imports and exports of minerals and metals, covering the year 1913, the war period, 1914-1918, and the year 1919. The figures for 1920 are also given where available.

It is intended to make this summary an annual publication and the present statement will be issued in revised form towards the close of the present year. Future issues will contain only the figures for the two years preceding that in which the statement is issued.

The Lumber Trade

The "ABC" British Columbia Lumber Trade Directory and Year Book, 1921. Vancouver, B. C., Progress Publishing Company, Limited. Price \$3.

This book contains summarized information about all the factors which affect this important British Columbian industry. This includes a directory of associations, lumber and shingle mills, manufacturers of special lumber products, logging camps, wholesalers, brokers and timber cruisers. One section contains the foreign customs tariffs on lumber and another is a consolidation of the provincial timber laws. A directory of mill supply houses completes the book.

Advertising Affiliation Convention

Big Meeting of Advertising Clubs to Take Place at Hamilton on September 30th.

The Advertising Affiliation Convention which will be held in Hamilton, Canada, this year will be unique in many respects. In addition to the present clubs which hold membership in this organization, viz—Cleveland, Rochester, Buffalo, Canton and Hamilton, five new clubs will line up for the event and it is expected that

they will be granted permanent membership in the organization. Among the newcomers are Erie, Ohio; Toledo, Ohio; London, Ont.; Toronto, Ont.; and Montreal, Que.

The slogan adopted for the Convention is "Let's to Business" and it will be the theme of this businesslike assembly. The dates of the meetings will be Friday, September 30th and Saturday October 1st, and much will be accomplished in this short period.

On Friday morning an International golf match between teams representing the various clubs will take place at the links of the Hamilton Country Club. A handsome trophy has been donated for this event.

Premier Meighen of Canada has consented to speak at one of the sessions and another of his cabinet will in all probability speak on world trade conditions.

The speakers who will introduce the business subjects have been very carefully selected and the complete program will be exceedingly interesting.

The Convention headquarters in Hamilton will be the Royal Connaught Hotel and it is expected that over 1000 will attend.

New Stock List

Tallman Brass & Metal Limited, Have Issued New Stock List Containing Valuable Data

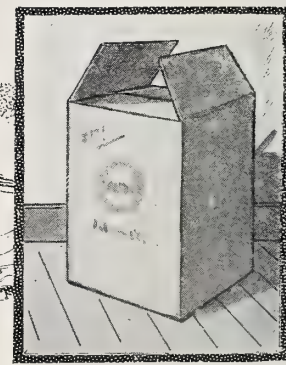
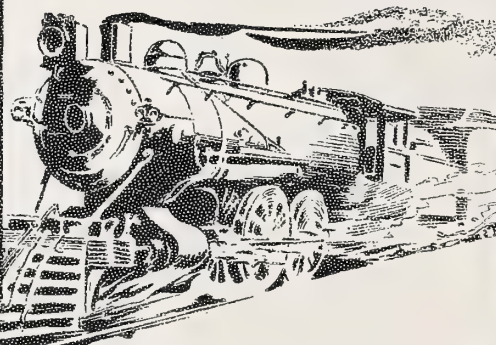
Tallman Brass & Metal, Limited, Hamilton, have issued three thousand copies of their July stock list and have mailed these throughout Canada. They contain particulars of a number of the lines manufactured and stocked by the company. Buyers of the various kinds of goods made by Tallman Brass & Metal, Limited, should make it a point to have one of these lists on file.

Two interesting developments in deep sea transportation took place at Vancouver recently with the shipment of chilled meat from Vancouver to Europe and the inauguration of a monthly passenger service between the Pacific and the Continent via the Panama Canal.

H. & D. Corrugated and Solid Fibre Board



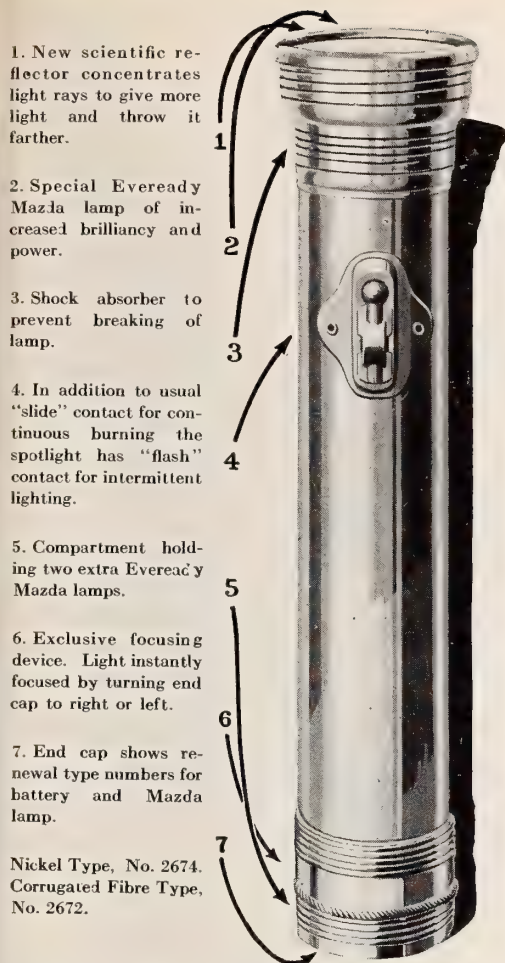
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TORONTO, CANADA



1. New scientific reflector concentrates light rays to give more light and throw it farther.

2. Special Eveready Mazda lamp of increased brilliancy and power.

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4. In addition to usual "slide" contact for continuous burning the spotlight has "flash" contact for intermittent lighting.

5. Compartment holding two extra Eveready Mazda lamps.

6. Exclusive focusing device. Light instantly focused by turning end cap to right or left.

7. End cap shows renewal type numbers for battery and Mazda lamp.

Nickel Type, No. 2674.
Corrugated Fibre Type, No. 2672.

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Better and Longer
Service*



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always been in
the shop—**

and you will appreciate the 7 big improvements that make this new Eveready Spotlight so greatly superior to all others for shop use.

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EVEREADY
SPOTLIGHT

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Making the Show Room Attractive

Style adopted by the Diamond State Fibre Company of Canada, Limited, in arranging their new show room at their plant at 235 Carlaw Avenue, Toronto.

Toronto Harbor Inspected

Some Facts and Figures About Present Developments From the Individual Standpoint.

The recent inspection of the harbor developments at Toronto by the firm of Barber, Wynne-Roberts & Seymour, consulting engineers, upon the occasion of their annual picnic, is interesting in so far as it was made particularly in the interests of several of the firms' clients in the British Isles and United States, who are considering establishing branch manufacturies in Canada and are conducting their investigations of conditions here through this firm. Speaking on the subject, one of the members of the firm emphasized the keen

interest of outside firms in Canada as a base for export trade and gave it as his opinion that Canadian firms were possibly not keenly alive to the possibilities of the situation, nor sufficiently familiar with the work of the Harbor Commission in preparing for the day when the St. Lawrence Deep Waterways would be an established fact.

The information was brought out that all piers and docks will furnish a present navigable depth of 24 feet and provision is made for an ultimate depth of 30 feet by dredging, as soon as the demands of navigation require it. In all their work of harbor development the Commissioners have kept before them the certainty that at some future date the St. Lawrence Deep Waterways must be constructed, and in order that Toronto should benefit to its fullest extent by this improved navigation and be prepared to accommodate the ocean carriers, which may in the near future be trading to ports on the Great Lakes, the Commissioners in their development are providing every modern facility for the economic and rapid unloading and loading of vessel cargoes both in the industrial districts and along the commercial waterfront of the inner harbor, together with adequate accommodation for passengers and the co-ordination of rail and water transportation, all of which will be in readiness to take care of the first ocean vessels to navigate the St. Lawrence Deep Waterway. In other words, Toronto will be prepared to accommodate 100 vessels of 5,000 tons and upwards with the equipment necessary to complete their unloading in 24 hours.

These facts should have a bearing upon the future, not only of Toronto industries, but also those throughout the Province. Ontario is strewn with industrial wrecks, responsibility for which must to some extent be laid at the door of insufficient and unintelligent business and engineering investigation. The fact that foreign firms find they can conduct their investigations satisfactorily through local channels would seem to indicate Canadian industries have been overlooking opportunities at their own door. This condition has no doubt been due to keen competition for industries among the smaller municipalities and the customary reticence among professional men in advertising their qualifications along these lines."



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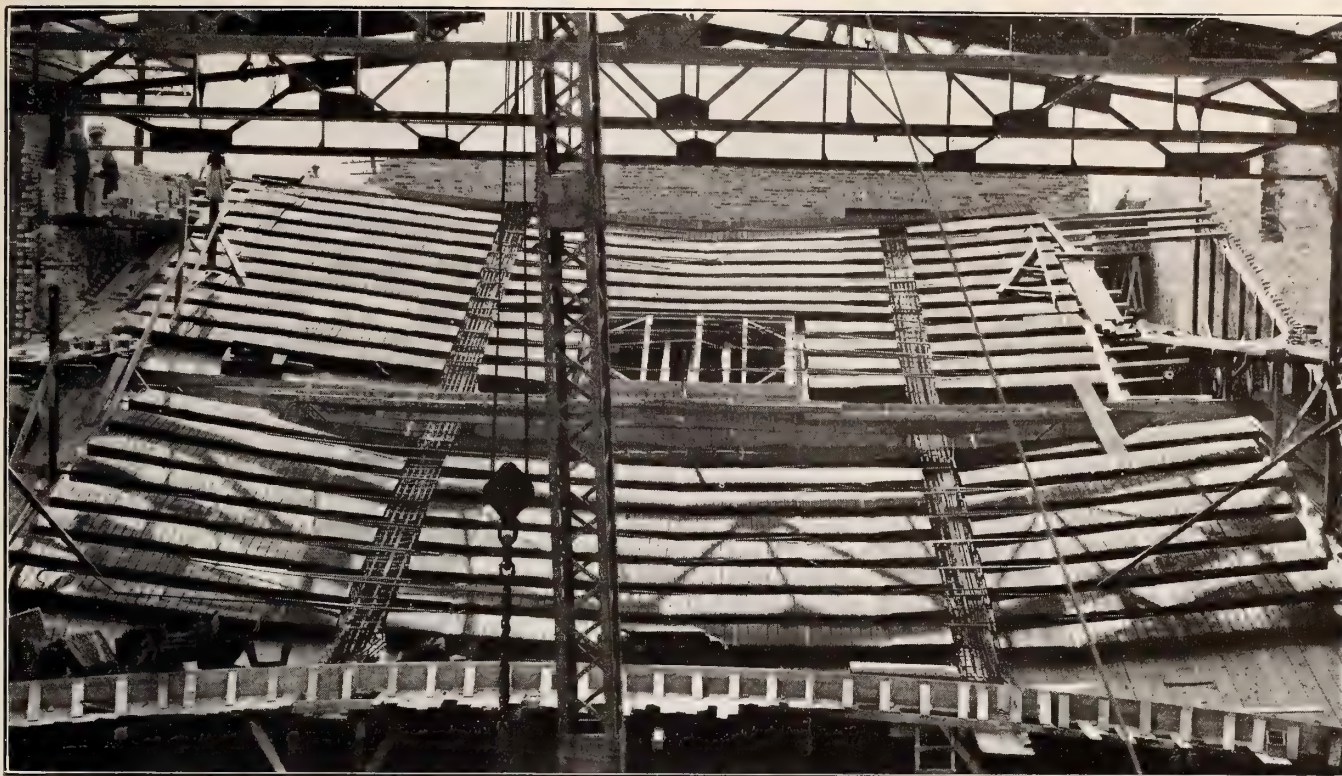
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Sullivan & Fried, Contractors

John Jeffries, Architect

Steel Floretyle over Hyrib used in new Standard Theatre, Toronto

Steel Floretyle Construction



A stack of 50 Floretyles, handled on a two-wheeled truck is equivalent in floor construction to 333 terra cotta tiles weighing 10,000 lbs.

This popular type of reinforced concrete construction consists of rows of specially manufactured hollow steel tile covered with a layer of concrete and separated by reinforced concrete joists, making a series of T beams. These deep, narrow joists carry the loads directly to the supports, while the Floretyles act merely as fillers, saving concrete, reducing dead weight, simplifying centering and economizing construction.

The Steel Floretyle are of special design and manufactured under powerful presses operating large multiple dies, which assure absolute accuracy and uniformity.

To secure greatest stiffness in supporting loads and resisting deformation in shape the Floretyles have extra deep stiffening ribs across the top, are deeply corrugated on the side, have special rounded corners and have additional stiffening flanges along the bottom edges.

The Hyrib extends continuously underneath the Floretyle and provides a flat ceiling with a perfect surface for plastering.

The corrugated flange at the lower edge of the Floretyle straddles the ribs of the Hyrib and fits into its mesh.

Secure our estimates, suggestions and pamphlet.

Trussed Concrete Steel Company of Canada, Limited

WALKERVILLE - ONTARIO

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Toronto, Montreal, Winnipeg, Calgary, Vancouver

WAREHOUSES

Winnipeg, Toronto, Calgary

Reinforcing Steel - Metal Lath - Steel Windows - Building Specialties

Industrial Statistics

Aluminium Ware Production

Manufacture of Aluminum Metal Products in 1920 Surveyed by Bureau of Statistics

The Dominion Bureau of Statistics has published a report on the manufacture of aluminum ware in Canada during the calendar year 1920. In the report it is pointed out that aluminum manufacturing in Canada may be divided into two industries, namely: the smelting of imported ores for the production of aluminum metal; and the manufacture of aluminum metal products. The manufacture of aluminum metal products is the only subject dealt with in the report issued. The report, prepared in the Mining, Metallurgical and Chemical Branch of the Bureau, gives in good detail the general statistics of the industry and shows that the Canadian production of aluminum utensils in 1920 supplied over 70 per cent. of the domestic demand. Over one and one-third million dollars worth of aluminum kitchen utensils and other articles manufactured from this metal were made during the year, the entire production being confined to plants operating in the province of Ontario. The entire production of the industry amounted to over \$1,600,000, and represented an increase in value of the materials used by the process of manufacture, amounting to more than one million dollars. The industry furnished employment to more than three hundred individuals, the amount paid in wages during the year being \$351,643. In addition to the above amount \$45,698 was paid to members on the administrative staffs. It is further stated that the amount of capital actually invested in this industry in Canada was more than three and one-quarter million dollars. Full details are given regarding the time in operation, salaries and wages paid, number of employees, quantity and nature of fuel used, and power equipment of the plants. General financial statistics of the industry are also shown.

The aluminum industry in America dates from 1890 when the first successful process was worked out for the economical extraction of the metal from its ores. The lightness and ductility of the metal and the fact that it is not readily attacked by organic acids, air or water, together with the fact that it transmits heat readily, soon brought it into favor as a material for kitchen utensils and it is in this connection that it has become so well known. Large quantities of aluminum wire are now used for electric transmission lines and quantities are used in the manufactures of such apparatus as cream separator parts and other light machinery. Alloyed with magnesium it finds extensive use as an alloy possessing great tensile strength which can be soldered. Aluminum bronzes, too, are finding extensive uses, and during the war great quantities were used in the manufacture of aeroplane engines and parts.

The aluminum ware manufacturing industry in Canada is expanding rapidly to meet the demand which has been created, and the future of this comparatively new industry is very promising.

This report is one of a number published by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics relating to the manufacture of chemical and mineral products in Canada. A complete list of these publications may be obtained on request.

Vegetable and Animal Oils

Report of Dominion Bureau of Statistics on 24 Plants Operating in 1918

"Canada's production of linseed oil and oil cakes in 1918 amounted to nearly five and one-half million dollars in value," states a report issued by the Dominion Bureau of Statistics, and yet only 34 per cent. of the four million bushels of flax seed consumed in Canada that year was used in the production of linseed oil. While the extraction of linseed oil represents by far the greater part of the vegetable and animal oil producing and refining industry in Canada, the report also includes production data of a number of other concerns engaged in work of a similar character. There were 24

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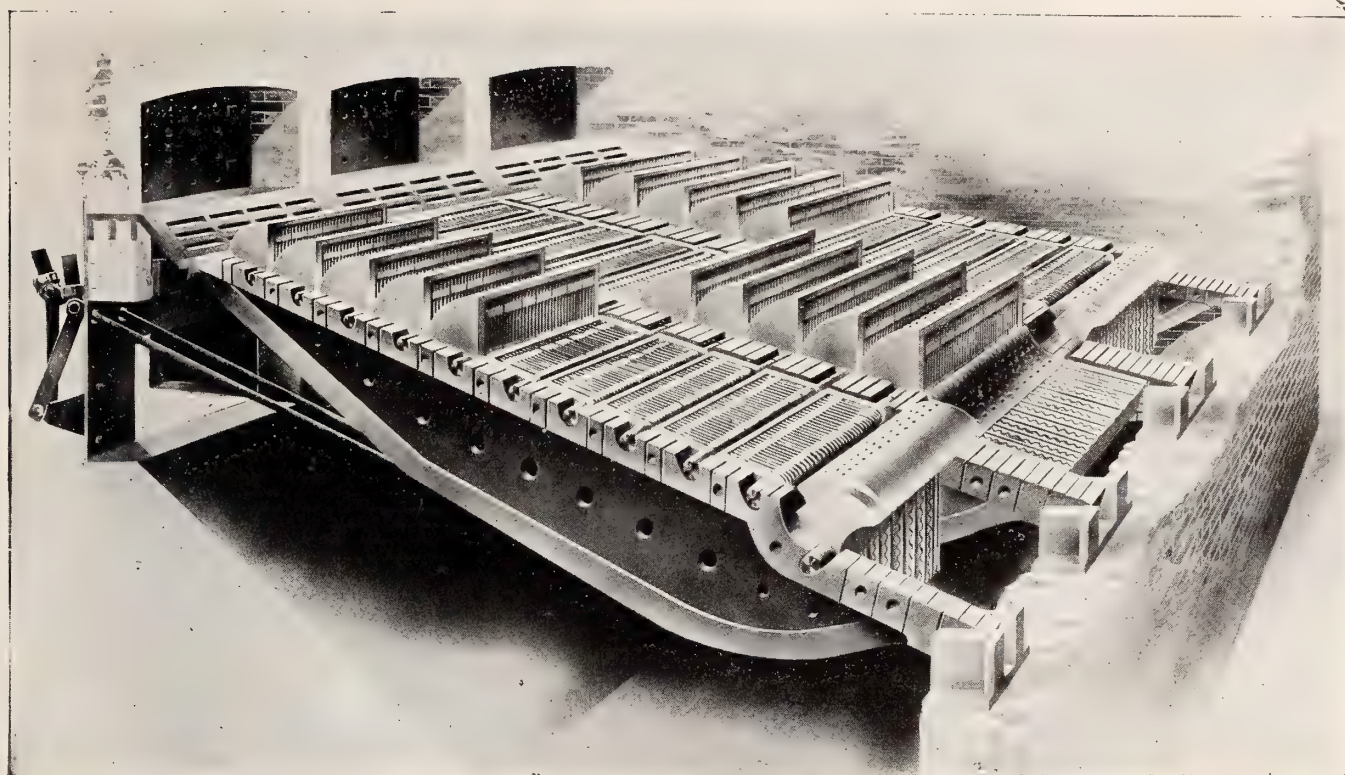
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The Waterous Engine Works Company, Ltd.
Brantford, Ontario

plants engaged in this industry in 1918. Seven of these, which produced linseed oil, are considered first as the value of their production represented over 75 per cent. of the total for the industry as a whole. The statistics follow:—

Linseed Oil Production

Number of plants.....	7
Capital investment.....	\$2,428,991
Land, buildings, etc.....	\$1,162,247
Cash and accounts.....	\$364,411
Materials on hand, etc.....	\$ 902,333
Materials used (value).....	\$4,684,669
Value of products.....	\$5,437,765
Crude linseed oil.....	\$2,936,838
Refined linseed oil.....	\$1,126,490
Oil cake.....	\$1,374,437

General Statistics

Number of plants.....	24
Capital investment.....	\$4,572,409
Land, buildings, etc.....	\$1,782,399
Cash and accounts.....	\$1,195,114
Materials on hand, etc.....	\$1,584,896
Salaries.....	\$188,677
Wages.....	\$194,702
Fuel used (value).....	\$37,507
Materials used (value).....	\$5,821,828
Value of products.....	\$7,165,259

Furniture and Upholstering

Operations of 270 Plants in Year 1919 Summarized in Statistical Report

Operations of 270 individual plants are summarized in report of Dominion Bureau of Statistics on furniture and upholstering industry in 1919. Of these 180 are located in Ontario, 49 in Quebec, 13 in British Columbia, 11 in Nova Scotia, 7 in Manitoba, 4 in New Brunswick and Prince Edward Island and 3 each in Alberta and Saskatchewan. Following are the principal statistics:—

Capital investment.....	\$24,400,099
Land, buildings and fixtures.....	\$6,692,994
Machinery and tools.....	\$3,690,186
Materials, stocks in process, etc.....	\$9,313,351
Cash, trading and operating accounts.....	\$4,703,568
Employees (number).....	9,124
Salaries and wages.....	\$78,73,158
Fuel consumption (value).....	\$354,347
Miscellaneous expenses.....	\$2,823,171
Cost of materials.....	\$9,666,073
Value of products.....	\$25,166,305

Repair Work

Report of Dominion Bureau of Statistics on Repairing Establishments in Canada in 1919.

A report on repair work in Canada during the year 1919 has just been issued by the Dominion Bureau of Statistics. While a certain amount of repair work is carried on in connection with every line of production there are comparatively few separate industrial establishments operated solely for the purpose of making repairs. Among these the principal ones are automobile repairs, bicycle repairs, boot and shoe repairs, elevator repairs and jewelry repairs. Following are the most important statistics relating to the industry:

Repair Work

Number of establishments.....	3,290
Total value of repair work.....	\$26,586,138
Aggregate investment.....	\$24,186,265
Wage earners (number).....	7,709
Wages.....	\$7,480,604
Salaried employees (number).....	1,299
Salaries.....	\$1,301,607

Automobile Repairs

Number of establishments.....	1,239
Value of repair work.....	\$101,182,756
Number of employees.....	3,629
Wages.....	\$3,728,414
Materials used (value).....	\$4,375,085

Bicycle Repairs

Number of establishments.....	136
Value of work.....	\$532,564
Materials used (value).....	\$156,350
Number of employees.....	205
Wages.....	\$174,181

Boot and Shoe Repairs

Number of establishments.....	1,125
Capital invested.....	\$1,677,408
Value of machinery.....	\$436,424
Value of production.....	\$3,241,004
Number of employees.....	1,470
Wages.....	\$1,249,397
Materials used (value).....	\$1,174,756

Elevator Repairs

Number of establishments.....	14
Capital investment.....	\$1,042,302
Value of work.....	\$1,321,280
Number of employees.....	252
Wages.....	\$306,420
Materials used (value).....	\$609,711

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Your policy as originally prepared may give permission to remain silent for not exceeding thirty days. But it may not, and the cessation of operations might void the insurance.

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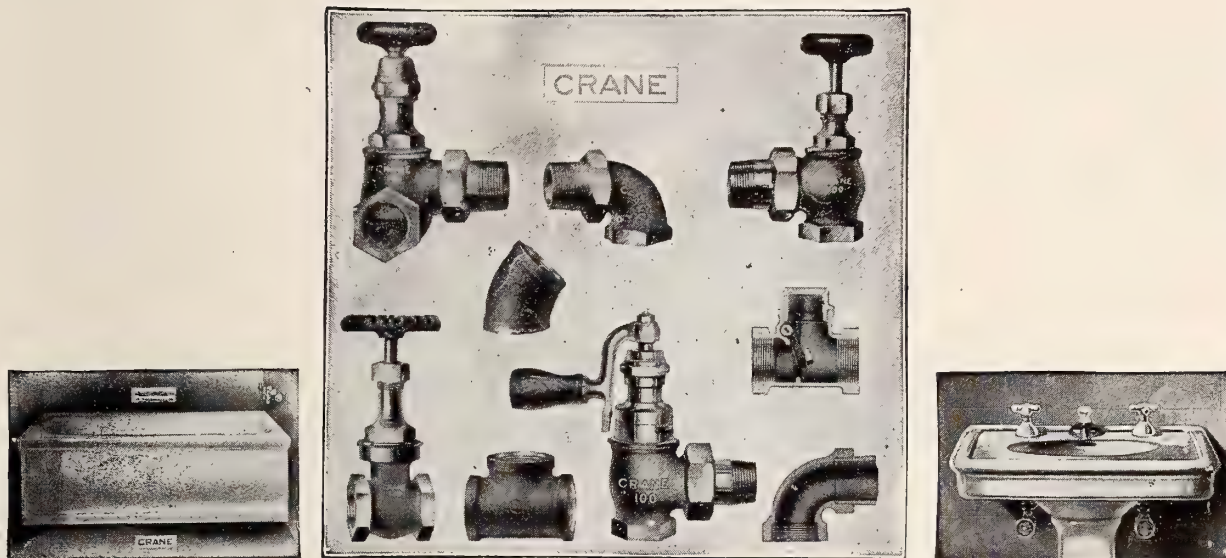
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Jewelry Repairs	
Capital investment.....	\$7,270,361
Value of work.....	\$9,400,270
Number of employees.....	3,463
Wages.....	\$3,319,761
Materials used (value).....	\$3,605,058

Distilled Liquors, 1918

Report Covers the Activities of Six Establishments Operating in Canada.

Six establishments making distilled liquors in Canada in 1918 produced whiskeys and other spirits valued at \$2,782,206, according to an advance chapter of "Chemicals and Allied Products in Canada in 1918," issued by the Dominion Bureau of Statistics. Four of these plants were situated in Ontario, one in Quebec, and one in British Columbia. As alcohol produced for the manufacture of whiskey must be placed in bond for at least two years, the statistics of production given in the report do not necessarily give information about the sale of the product during the year. Following are the principal statistics of the industry:

Number of establishments.....	\$2,834,797
Value of output (including by-products).....	\$10,018,168
Capital investment.....	\$3,105,507
Cash and accounts.....	\$2,864,806
Land, fixtures, machinery, etc.....	\$4,047,855
Average number of employees.....	579
Salaries and wages.....	\$610,676
Fuel used (value).....	\$134,172
Materials used (value).....	\$2,271,178
Miscellaneous expenses.....	\$814,755

Petroleum Refining Industry

Operations of Ten Canadian Plants During 1918 Covered by a Statistical Report

In an advance chapter of "Chemicals and Allied Products in Canada in 1918," issued by the Dominion Bureau of Statistics, are given some figures relating to the petroleum refining industry. Of

ten plants in operation during that year, three were located in Ontario, three in Alberta, and one in each of the provinces of Nova Scotia, Quebec, Saskatchewan and British Columbia. There was an average number of 2,938 wage-earners receiving a per capita payment of \$1,175. Following are the chief statistics of the industry:—

Number of plants.....	10
Capital investment.....	\$35,745,410
Land, fixtures, etc.....	\$23,535,257
Cash and accounts.....	\$407,408
Materials on hand, etc.....	\$11,892,745
Wage-earners (number).....	2,938
Wages.....	\$3,451,642
Salaried employees (number).....	272
Salaries.....	\$371,676
Fuel used (value).....	\$3,242,796
Materials used (value).....	\$25,454,575
Miscellaneous expenditures.....	\$2,129,825
Value of products.....	\$37,866,907

Malt Liquors, 1918

Principal Statistics of Industry, Covering the Operations of Sixty-three Plants.

In an advance chapter of "Chemicals and Allied Products in Canada in 1918," issued by the Dominion Bureau of Statistics, there are given interesting figures about the production of malt liquors during that year. Of sixty-three plants in operation during the year, twenty-four were located in Ontario, fourteen in British Columbia, ten in Quebec, seven in Manitoba, four in Alberta, two in New Brunswick, one in Nova Scotia, and one in Saskatchewan. The principal statistics of the industry as given in the report are as follows:

Number of establishments.....	63
Capital investment.....	\$32,433,507
Cash and accounts.....	\$7,850,252
Land, fixtures, machinery, etc.....	\$19,821,157
Materials on hand, etc.....	\$4,762,098
Average number of employees.....	2,750
Salaries and wages.....	\$2,804,974
Value of products.....	\$16,223,080
Fuel consumed (value).....	\$525,539
Materials used (value).....	\$6,543,058
Miscellaneous expenses.....	\$3,653,165

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may save trouble and expense by
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Ocean Shipping News

Steamship Sailings

FROM MONTREAL

To Liverpool.

Oxonian.....	White Star-Dominion Line.....	Ab't October 1
Megantic.....	White Star-Dominion Line.....	Ab't October 8
Metagama.....	Canadian Pacific Ocean Services Ltd.....	Ab't October 14
Canadian Victor.....	Canadian Gov. Mer. Marine..... Ltd.....	Ab't October 4
Melita.....	C.P.O.S., Ltd.....	Ab't October 21
Canada.....	White Star-Dominion Line.....	Ab't October 22
Minnedosa.....	C.P.O.S., Ltd.....	Ab't October 28
Vedic.....	White Star-Dominion Line.....	Ab't October 29

To London

Dunbridge.....	C.P.O.S., Ltd.....	Ab't October 6
Vindelia.....	Cunard Line.....	Ab't October 7
Vennonia.....	Cunard Line.....	Ab't October 14
Bolingbroke.....	C.P.O.S., Ltd.....	Ab't October 14
Venusia.....	Cunard Line.....	Ab't October 21
Batsford.....	C.P.O.S., Ltd.....	Ab't October 25
Vitellia.....	Anchor-Donaldson Line.....	Ab't October 28

To Glasgow

Saturnia.....	Anchor-Donaldson Line.....	Ab't October 1
Pretorian.....	C.P.O.S., Ltd.....	Ab't October 4
Tunisian.....	C.P.O.S., Ltd.....	Ab't October 8
Cassandra.....	Anchor-Donaldson Line.....	Ab't October 15
Cabotia.....	Cunard Line.....	Ab't October 22
Gracia.....	Anchor-Donaldson Line.....	Ab't October 29

To Newcastle-on-Tyne

Cairndhu.....	Thomson Line.....	Ab't October 1
Cairnmona.....	Thomson Line.....	Ab't October 8
Cairngowan.....	Thomson Line.....	Ab't October 15
Cairnross.....	Thomson Line.....	Ab't October 22
Cairnvalona.....	Thomson Line.....	Ab't October 29

To Avonmouth Dock

Oxonian.....	White Star-Dominion Line.....	Ab't October 1
Welshman.....	White Star-Dominion Line.....	Ab't October 8
Salacia.....	Cunard Line.....	Ab't October 14
Concordia.....	Cunard Line.....	Ab't October 15
Caledonian.....	White Star-Dominion Line.....	Ab't October 15
Bothwell.....	C.P.O.S., Ltd.....	Ab't October 18
Turcoman.....	White Star-Dominion Line.....	Ab't October 22
Lakonia.....	Anchor-Donaldson Line.....	Ab't October 28

To Manchester

Manchester Producer.....	Manchester Line.....	Ab't October 17
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To Leith

Cairndhu.....	Thomson Line.....	Ab't October 1
Cairnmona.....	Thomson Line.....	Ab't October 8
Cairngowan.....	Thomson Line.....	Ab't October 15
Cairnross.....	Thomson Line.....	Ab't October 22
Cairnvalona.....	Thomson Line.....	Ab't October 29

To Antwerp

Scandinavian.....	C.P.O.S., Ltd.....	Ab't October 1
Corsican.....	C.P.O.S., Ltd.....	Ab't October 15

To Naples-Genoa

Caserta.....	C.P.O.S., Ltd.....	Ab't October 15
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To Danzig

Scandinavian.....	C.P.O.S., Ltd.....	Ab't October 1
Corsican.....	C.P.O.S., Ltd.....	Ab't October 15

FROM QUEBEC

To Liverpool

Oxonian.....	White Star-Dominion Line.....	Ab't October 1
Empress of Britain.....	C.P.O.S., Ltd.....	Ab't October 4
Megantic.....	White Star-Dominion Line.....	Ab't October 8
Empress of France.....	C.P.O.S., Ltd.....	Ab't October 18
Canada.....	White Star-Dominion Line.....	Ab't October 22
Vedic.....	White Star-Dominion Line.....	Ab't October 29

FROM NORTH SYDNEY

To St. John's (Nfld.)

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Kyle.....	North Sydney Board of Trade.....	Tuesday, Thursday and Saturday every week

To St. Pierre et Miquelon

Pro Patria.....		October 5 and 19
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FROM VANCOUVER, B.C.

To Honolulu, Suva, Auckland and Sydney

Mahura.....	Canadian-Australasian Line.....	Ab't October 8
Waihora.....	Canadian-Australasian Line.....	Ab't October 15

To New Zealand and Australia

Canadian Scottish.....	Canadian Gov. Mer. Marine, Ltd.....	Ab't October 15
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To Yokohama, Kobe, Nagasaki, Shanghai and Hong Kong.

Empress of Japan.....	C.P.O.S., Ltd.....	Ab't October 18
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To Yokohama, Kobe, Nagasaki, Shanghai, Manila and Hong Kong

Empress of Asia.....	C.P.O.S., Ltd.....	Ab't October 13
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To Yokohama, Kobe, Hong Kong and Manila

Talhybius.....	Blue Funnel Line.....	Ab't October 14
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To India

Canadian Transporter.....	Canadian Gov. Mer. Marine, Ltd.....	Ab't October 15
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To Kobe, Shanghai, Hong Kong and Manila

Melville Dollar.....	Dollar Line.....	Ab't October 23
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FROM VICTORIA

To Yokohama, Kobe, Hong Kong and Manila

Ixon.....	Blue Funnel Line.....	Ab't October 7
Talhybius.....	Blue Funnel Line.....	Ab't October 28

Ocean Tonnage

Estimates of Tonnage Now Afloat Indicate a Total in Excess of 69,000,000 Gross Tons

The tonnage of seagoing merchant vessels launched during the three years ending December 31, 1920 comprised more than 25

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CONTRACTORS

per cent. of all similar tonnage launched in the twenty-nine years beginning with 1892, for which the compilations of Lloyd's Register of Shipping are available, says *Commerce Monthly*, published by the National Bank of Commerce, New York.

Prior to the European War, the largest amount of shipping launched in any year was 3,332,882 gross tons, in 1913. Ship construction decreased during the earlier phase of the war, falling to 1,201,630 tons in 1915. In the following years, however, urgent demand for tonnage stimulated construction but it was not until 1918 that total launchings exceeded those of 1913. In that year, thanks very largely to the construction of more than 5,447,444 tons, while in 1919 the total was 7,144,549, of which more than 4,000,000 were the product of American yards. In 1920 shipbuilding activity was reduced somewhat but launchings were still in excess of any previous year except 1919.

In spite of the destruction by enemy action of over 13,000,000 gross tons of seagoing merchant vessels between August 1, 1914 and November 11, 1918, and the loss through marine hazards of an additional 2,390,000 tons during the same period, the world's mercantile tonnage afloat is today greater than it would be had the average rate of increase for the ten years prior to 1914 continued in the years since that date. Estimates of tonnage now afloat indicate a total in excess of 60,000,000 gross tons, approximately 11,000,000 gross tons above the figure for June 30, 1914.

New Canadian Liner

The "Empress of Canada" Will be the Largest Ship in the Pacific Service.

The new Canadian Pacific liner, the "Empress of Canada," although smaller in size than several Atlantic steamships, will hold first place on the Pacific. Strikes in British dockyards have delayed the completion of the ship but she will soon be ready to report to her station.

She has an over-all length of 653 feet, is 77 feet 9 inches in breadth and 53½ feet in depth to the bridge deck; she has a straight stem and cruiser stern, three funnels and two pole masts.

There is a continuous shelter deck with bridge, promenade and boat decks over, the former extending for the full length of the ship; two complete between decks and lower and orlop between-decks at the fore and aft ends. The Empress of Canada has a gross tonnage of 22,000 tons, and is arranged to carry about 490 first class 106 second class, 238 third class and 932 Asiatic steerage passengers, and a crew of 547. Of the cargo spaces, a large portion has been fitted for the carriage of silk and refrigerated cargo. Her speed is about 21 knots. She is built to the highest class of Lloyd's Register full Board of Trade requirements.

Adds Another Ship to Fleet

Canadian Pacific Railway Secures New German Liner Tirpitz for its Pacific Fleet

Another vessel of the great fleet which Germany was building to capture the world trade during the late war, has passed into the hands of Canadian interests. The 19,300 ton liner "Tirpitz" built during the war and completed shortly after, has been purchased outright by the Canadian Pacific Railway and will be added to the C.P.R.'s Pacific ocean fleet which already dominates Pacific ocean trade.

In addition to being reconditioned and remodelled up to C.P.R. standards the new liner will be converted into an oil burner. She is slightly larger than the Empress of Asia and Empress of Russia, the two largest liners in the Pacific and not much smaller than the new Empress of Canada which is still in the builders' hands.

The Tirpitz will be renamed the Empress of China, a name which had already been intended for the Kron Prinz Wilhelm, and work is now being rushed forward in reconditioning the liner. She is 588 feet in length, 75 feet in breadth and 41½ feet depth. The total additional to the C.P.R. fleet this season through the purchase of new and palatial German liners is over the sixty thousand ton mark, viz., Kaiserin Auguste Victoria, 25,000 tons, now Empress of Scotland for Atlantic service; the Kron Prinze Wilhelm 17,000 tons for Pacific trade and the Tirpitz 19,000 tons for Pacific trade.

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Canada-South Africa Direct Service

Regular monthly sailings from Montreal in Summer and St. John, N.B., in Winter, calling at Cape Town, Algoa Bay, (Port Elizabeth), East London, Port Natal (Durban) and Delagoa Bay in the order named.

Canada-West Africa Direct Service

From Montreal in Summer, and from St. John, N.B., in Winter, monthly sailings for Dakar, Sierra Leone, Secondee, Accra and Lagos, and other ports on the coast, if sufficient inducement offers.

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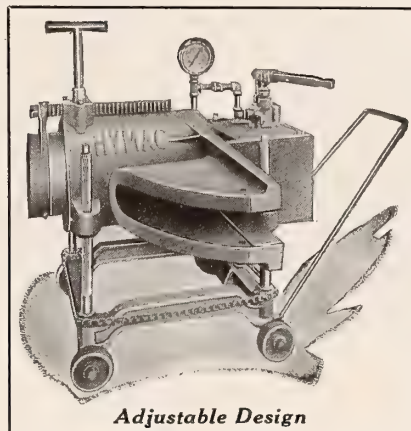
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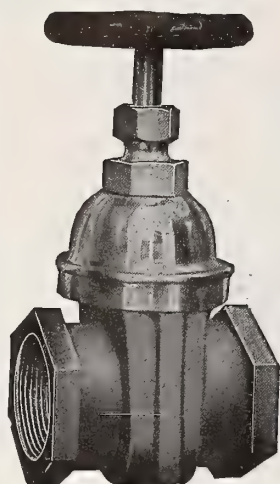
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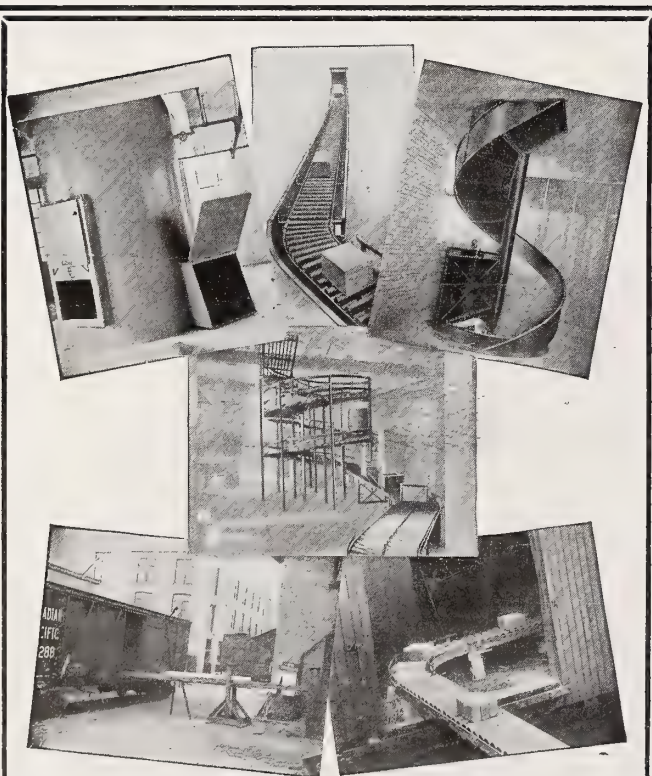


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Metal and beauti-
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They are not made of one quality
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The Kerr Engine Co., Limited
VALVE SPECIALISTS
WALKERVILLE - ONTARIO



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Canadian Mathews Gravity Carrier Co. Ltd.,
PORT HOPE, ONT.

Will Start New Service

French Line to Inaugurate Service between Pacific Ports and Europe via Panama

Starting in October, the French Line will inaugurate a monthly freight service between San Francisco and other Pacific Coast ports through the Panama Canal to continental Europe. The service will be maintained by three steamers of 8,000 tons deadweight, and it is the company's intention to add passenger steamers later. Pacific ports of Central America and Mexico are to be included in the steamers' calls, while Hamburg, Antwerp, Havre and Bordeaux will be the eastern terminals.

Have Built Twenty Ships

Coughlan Shipyards, Vancouver, have now to credit Score of Steel Vessels

With the launching on August 31, of the 8,100 ton freighter, Canadian Transporter, the Coughlan Shipyards, Vancouver, have completed an even score of steel vessels. The company have one more ship to complete for the Canadian Government Merchant Marine and this ship will be launched in a few weeks.

A Prince Rupert Yard

Wallace Shipyards win Praise for performance of first steel Ships built by them

The performance of the C. G. M. M. freighter Canadian Scottish, the first steel ship built at Prince Rupert for the Canadian government, when she made an average official speed of 14.1 knots an hour on her trial trip reflects credit on the northern port and the builders, the Wallace Shipyards, says the Vancouver World. If the Prince Rupert dispatches are correct the time made by the boat will be better than many of the ships turned out for the government fleet.

In an interview Mr. H. J. Turney, superintendent of the yards at Prince Rupert and secretary of the Wallace Shipyards, stated that his firm will have the Canadian English in the water about the end of September.

The Wallace Yard covers fully forty acres, and is equipped with some of the latest shipbuilding machinery. Its men are steadily employed, and among the staff are included a number of skilled mechanics from the firm's yards in North Vancouver.

A Great Achievement

First large passenger ship built in British Columbia is launched

A notable feat in shipbuilding has been achieved by Wallace Shipyards Limited, North Vancouver, with the launching on August 29, of the S. S. "Princess Louise," the first large size passenger vessel to be made in British Columbia. The "Princess Louise" was built for the Canadian Pacific Railway and will be used in the coastal trade.

She is of steel, 4200 tons gross, 330 feet over all, 317 feet B. P., with a beam of 48 feet and a depth of 18.6 feet. Her engines will develop 4500 H. P., and she will develop a speed of 17.5 knots, although her specifications call for a speed of only 16 knots. Although not quite as long as the Princess Charlotte, she will exceed the Charlotte's gross tonnage by 500 tons and her beam will be 8 feet more than that of the Princess Charlotte.

There is furnished accommodation for 300 passengers and in the diningroom there will be accommodation for 140 persons. Separate second-class diningroom and smoking-room will also be provided. The refrigerating plant will be of the very latest type and will be sufficiently large to contain a carload of perishables. Powerful derricks are a feature of the freight department. One of her derricks has a lifting power of 15 tons.

Apart from the steel, hardwoods and glass, the vessel is totally a British Columbia product. Her entire woodwork is from the Wallace joiner shop. The electric wiring was



The Call of The Open

WHEN the days begin to have that unmistakable fall "tang"—when you shiver more than a trifle if you leave your coat home nights—when the leaves are turning brown quicker than you can watch them—right then you feel that impulse to climb into that old khaki suit, to pull on those old knee boots, and to fondle that fine little old rifle—

AND to get up north where the big fellows are—moose, deer, caribou and bear, at your choice according to locality. Why not? The backwoods of Ontario are calling you to a real fall hunter's holiday.

AND it's so simple to get there. The Canadian Pacific takes you to all the best hunting country in Ontario. Ask any Canadian Pacific agent, or

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Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

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done by a Vancouver firm and the wrought iron grill and railwork was furnished by Westminster concerns. The glass was provided by a Vancouver firm, the leaded pieces being made in Vancouver shops.

To Mr. R. All. B. S. C., formerly chief draftsman for Fairfield's, Glasgow, goes the credit of designing the vessel. A considerable portion of the interior designing of the vessel has been supervised by Mr. F. Gildersleeve, who also supervised much of the interior designing of the Hotel Vancouver. The interior decorations of the vessel have already attracted the attention of many eminent designers and it is an assured fact that there are no vessels operating on the coast which will be the equal of the Princess Louise in this respect.

Oriental Trade

Official of Canadian Government Merchant Marine reports on visit to the East

After spending the past six months closely investigating trade, shipping and commercial conditions in general in the Far East, including China, Japan, Strait Settlements and the Philippines, Mr. A. Brostedt, representing the Canadian National Railways and Canadian Government Merchant Marine has returned convinced of the great trade possibilities existing on the other side of the Pacific.

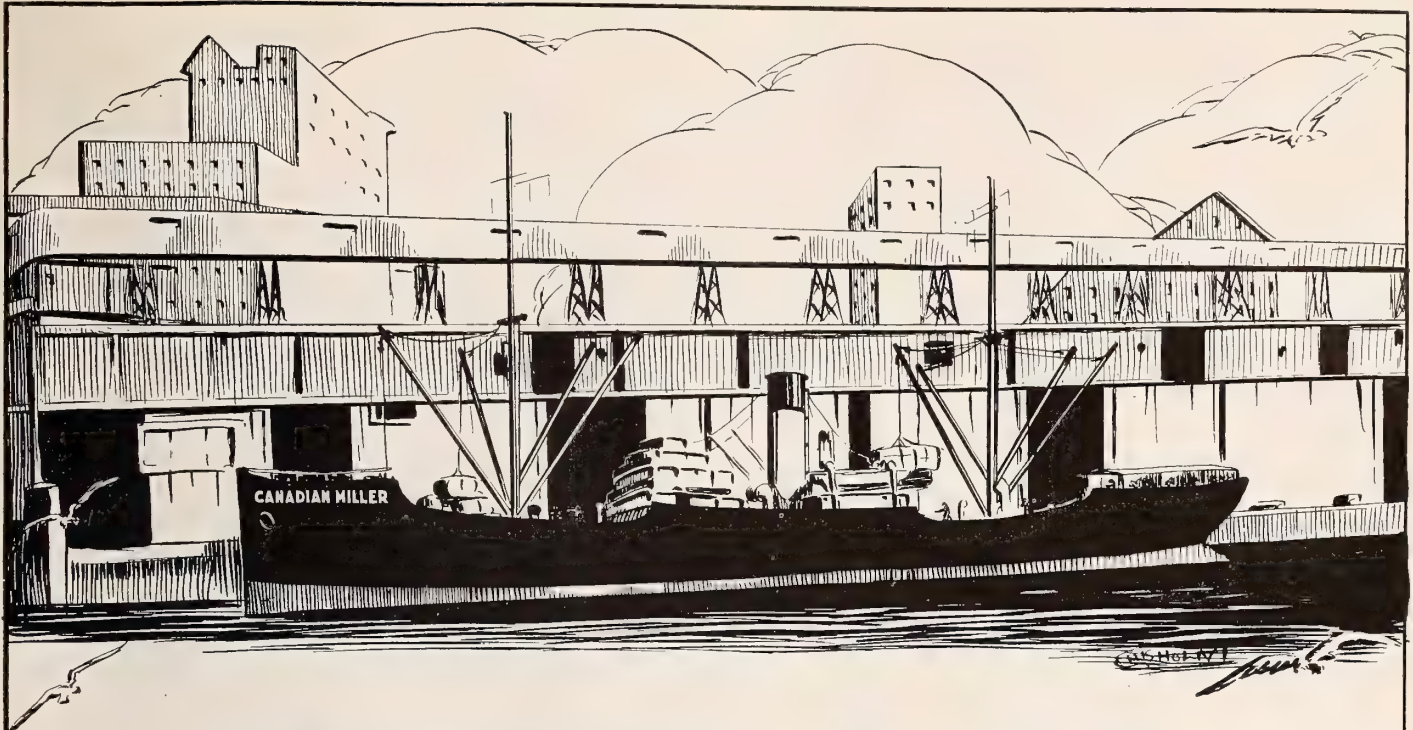
One of the facts impressed on Mr. Brostedt during his stay in the Far East was the determined effort being made by other countries to permanently establish themselves in that market. Great Britain's trade with the Far East is again climbing, her long established connections there standing her in good stead in the big commercial race now under way.

But other nations are not overlooking many bets, he says. Representatives of American firms are on the ground and are competing strongly with all comers. Germany is also putting forward an earnest endeavor to get back into the field again, and products from that country are appearing in greater number and variety on the market every day. Another competitor is Belgium, one of the biggest contracts for what will be the largest bridge in China having been awarded a Belgian engineering firm.

"Lumber, railway supplies, raw materials of every description, machinery for manufacturing plants and many other articles too numerous to mention can find a ready market on the other side of the Pacific," said Mr. Brostedt in an interview in the Vancouver World. "The nation that will get the greater part of this trade, however, will be the one that will go after it with determination, will place men in the field to get it and will be ready and willing to meet the requirements. Canada is getting some of this trade, but not by any means the amount it could get if the manufacturers of the Dominion were to get after it as vigorously as other nations are doing."

"One of the points that manufacturers here must continually keep in mind is that when they land an order from the Far East it should not be regarded as something that can be used simply to replace domestic trade that might have fallen off for the time being. In the past there has been a tendency on the part of Canadian manufacturers to regard the Oriental market as only a stop-gap, to be ignored when conditions at home grew brighter. The merchant in the Far East dislikes such treatment and in consequence turns in some other direction when he has another order," said Mr. Brostedt.

"The business situation in China and Japan is in fairly good shape," he continued, "but in the former country the unsettled state of internal affairs is retarding progress slightly. When the political outlook has simmered down again there will be a big demand for all kinds of materials. Chief among them will be those needed for railway and bridge building. At present," he said, "there are only six thousand miles of railway in the whole of China and the programme planned some little time ago provided for the construction of a very large mileage."



“National” Service Overland and Oversea.

“Export Trade Conditions” published by the Canadian Manufacturers’ Association, recently, says :-

“The ratio of manufactured goods to the total exports from Canada 1900-21 - has been as follows :-

1900	8 per cent
1910	13 per cent
1916	32 per cent
1919	43 per cent
1920	33 per cent

and again :-

“A . . . facility not previously at the disposal of Canadian exporters is the Canadian Merchant Marine. For years there has been an undercurrent of grumbling among Canadian Exporters because of the lack of direct routes to many ports in which they were interested as shippers. We now have a fleet sailing under Canadian control from Canadian ports, of a size which ten years ago we should have deemed impossible. Now, we are inclined to grumble because it may not be making as much money as it should or isn’t going to just the particular ports we want at the moment. Part of our job now is to help fill those ships. We can’t have unfilled ships and retain the privilege of grumbling about them, too, or if we do grumble, let us grumble with some constructive effect !”

EXPORT TRADE STABILIZES INDUSTRY.

CANADIAN GOVERNMENT MERCHANT MARINE

“Canada’s Commerce Carriers”

For further information ask any agent of the Canadian National or Grand Trunk Railways or

F. G. Wood

General Agent for Ontario
Toronto, Ont.

W. Cunningham

General Freight Agent
Montreal, Que.

World's Tonnage

Statistics showing ownership of World's tonnage of steel and iron sea-going vessels

Very interesting figures are contained in the new edition of Lloyd's Register Book showing the ownership of the world's tonnage in steel and iron sea-going vessels. The tonnage figures are as follows:

	June 1914 Tons gross	June 1921 Tons gross	Difference between 1921 and 1914 Tons gross
United Kingdom	18,877,000	19,288,000	x411,000
British Dominions	1,407,000	1,950,000	x543,000
America (U.S.)	1,837,000	12,314,000	x10,477,000
Austria-Hungary	1,052,000	nil	—
Denmark	768,000	866,000	x98,000
France	1,918,000	3,046,000	x1,128,000
Germany	5,098,000	654,000	--4,444,000
Greece	820,000	576,000	--244,000
Holland	1,471,000	2,207,000	x736,000
Italy	1,428,000	2,378,000	x950,000
Japan	1,642,000	3,063,000	x1,421,000
Norway	1,923,000	2,285,000	x362,000
Spain	883,000	1,094,000	x211,000
Sweden	992,000	1,037,000	x45,000
World's Total	42,514,000	54,217,000	x11,703,000

The tonnage of wood vessels owned in 1914 amounted to 1 per cent of the total steam tonnage, whereas for the present year that percentage has risen to 3.9 per cent. This is, of course, one of the effects of the shortage of tonnage during the war, which resulted in the construction of a large number of wood vessels. Whereas in 1914 the wood sea-going tonnage owned in the United States amounted to 210,000 tons, the corresponding figure is now no less than 1,210,000 tons. Wood vessels, however, are not of great importance in international trade, and for the purposes of comparison have been excluded in the above table.

Recent Trade Enquiries

A list of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C. M. A., Toronto.

FOREIGN

751. South Africa—A reliable firm of exporters and importers with head office in London, England, and branch office in South Africa, desires to make connections with Canadian exporters of agricultural machinery and implements, manufacturers of wood, paper, building material, asbestos sheets and stamped metal ceilings, etc.
752. Great Britain—A firm in Great Britain wishes to get in touch with exporters who are in need of selling agents in Liverpool. The name of this firm is on the SPECIAL REGISTER of the Board of Trade, and they are interested in the following lines: canned goods, green fruit, timber.
753. France—A French firm of export and import merchants are interested in developing Canadian trade, and have investigated the French markets thoroughly. They consider that at the present time there is an opening for the following goods, and would like to make connections with Canadian exporters: canned salmon; canned lobster; paper, news and other pulp papers; twine and jute products.
754. Great Britain—An old established firm in Bradford, England, who are established as selling agents have a splendid clientele in the following trades: electrical machinery and apparatus; hardware (wholesale); steel and art metal construction. They wish to communicate with any Canadian manufacturers of the above lines considering opening an office in England.
755. Dried green peas—A London company asks to be placed in touch with Canadian packers of canned green peas, for which they are in the market.
756. Salmon, Condensed Milk—A French firm desire correspondence with Canadian shippers of salmon and condensed milk.
757. Small Hardware—A firm of hardware merchants in good standing in Barbados would like to receive catalogues and price lists of butts and hinges of various sizes and makes.



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No charge or obligation attaches to this service. Business organizations are invited to make use of it.

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Department of Colonization and Development

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List of Articles which will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. Rates for insertion in this department, \$4.00 per heading per year (12 insertions).

ABRASIVES

- *Canadian Hart Wheels, Limited, Hamilton, Ont.
- *Dominion Abrasive Wheel Co., New Toronto, Ont.
- *Norton Company of Canada, Ltd., Hamilton, Ont.

ACCOUNT BOOKS

- *The Brown Bros., Ltd., Toronto.

ACCUMULATORS, hydraulic

- *The Hydraulic Machinery Co., Limited, Montreal.

ACETYLENE GAS

- *The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACETYLENE GAS BURNERS

- Economic Acetylene Burner Co., Toronto, Ont.
- *The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACIDS

- *The Grasselli Chemical Co., Ltd., Toronto.
- *The Nichols Chemical Co., Ltd., Montreal, Que.

ADVERTISING NOVELTIES

- Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES

- Charles Gurd & Co., Ltd., Montreal, Que.
- J. J. McLaughlin, Ltd., Toronto.

AIR COMPRESSORS

- *Canadian Ingersoll-Rand Co., Sherbrooke, Que.
- *Smart-Turner Machine Co., Ltd., Hamilton, Ont.

AIR LIFT PUMPS

- *Canadian Ingersoll-Rand Co., Sherbrooke, Que.

ALCOHOL

- *Canadian Industrial Alcohol Company, Ltd., Montreal, Que.

ALKALIES

- Brunner, Mond Canada, Limited, Amherstburg, Ont.

ALUMINUM

- *Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto.

ALUMINUM COOKING UTENSILS

- "Ideal" Aluminum Products, Ltd., Toronto.

AMMONIA

- Canadian Ammonia Co., Ltd., Toronto, Ont.

ANCHORS, all steel

- Beauchemin & Fils, Ltd., Sorel, Que.

ANGLE BARS

- *Burlington Steel Co., Ltd., Hamilton, Ont.
- *MacKinnon Steel Co., Limited, Sherbrooke, Que.
- *The Steel Company of Canada, Ltd., Hamilton, Ont.

ARSENIC

- *Deloro Smelting & Refining Co., Limited, Deloro, Ont.

ARTIFICIAL LIMBS

- Chesley Artificial Limb Co., Ltd., Hantsport, N.S.

ASBESTOS

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEATHING

- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEET AND PISTON PACKINGS

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS STEAM PIPE AND BOILER COVERINGS

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS TEXTILES

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

AUTOMOBILE PARTS

- *Dominion Forge & Stamping Co., Walkerville, Ont.

AUTOMOBILE TIRES

- Ames-Holden-McCreedy, Limited, Montreal, Que.

AWNING CORD (cotton)

- Hamilton Cotton Co., Hamilton, Ont.

AXLES

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL

- Alonzo W. Spooner, Ltd., Port Hope, Ont.
- Beveridge Supply Co., Limited, Montreal, Que.

- *Hoyt Metal Co., Toronto, Ont.
- Magnolia Metal Co. of Canada, Ltd., Montreal, Que.

- *The Canada Metal Co., Toronto, Ont.
- *Tallman Brass & Metal, Ltd., Hamilton, Ont.

BAGS, Cotton

- The Canadian Bag Co., Limited, Montreal, Que.

BAGS, Jute

- The Canadian Bag Co., Limited, Montreal, Que.

BAGS, travelling

- J. Eveleigh & Co., Ltd., Montreal.
- Lamontague, Ltd., Montreal, Que.
- *The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

BAND RESAWS

- *Canada Machinery Corporation, Limited, Galt, Ont.
- *P. B. Yates Machine Co., Ltd., Hamilton, Ont.

BAND SAWS

- *E. C. Atkins & Co., Inc., Hamilton, Ont.

BANK FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK AND OFFICE RAILINGS AND CAGES

- *Canada Wire and Iron Goods Co., Hamilton, Ont.
- *Dennis Wire & Iron Works Co., London, Ont.
- *The Geo. B. Meadows, Toronto, Wire, Iron & Brass Works Co., Ltd., Toronto, Ont.

BARRELS, steel, and containers

- *Smart-Turner Machine Co., Ltd., Hamilton, Ont.

BARS, iron

- London Rolling Mill Co., Ltd., London, Ont.

BARS, steel

- London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS

- A. J. Reach Co., Brantford, Ont.

BATHS, enamelled

- Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry

- *The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Flashlight

- *The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Storage

- *The Canadian National Carbon Co., Ltd., Toronto, Ont.

BEARINGS, pillow block and upright

- *Canadian Fairbanks-Morse Company, Ltd., Montreal, Que.

BELT HOOKS

- *Torrington Company, Limited, Upper Bedford, Que.

BELTING CHAINS

- *Canadian Link-Belt Company, Ltd., Toronto, Ont.

BELTING, elevator

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather

- The Beardmore Belting Co., Ltd., Toronto, Ont.
- *J. L. Goodhue & Co., Danville, Que.
- *McArthur Beltings, Limited, Brockville, Ont.

- *The D. K. McLaren Belting Co., Ltd., Montreal, Que.
- *The J. C. McLaren Belting Co., Ltd., Montreal, Que.

BELTING, rubber

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
- *Gutta Percha and Rubber Ltd., Toronto, Ont.

BELTING, stitched cotton duck

- *Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS

- The Crown Lumber Co., Woodstock, Ont.

BISCUITS

- The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS

- *A. O. Leslie & Co., Montreal, Que.

BLANKETS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.
- J. Walshaw & Son, Ltd., Bolton, Ont.

BLANKETS, horse

- Slingsby Mfg. Co., Ltd., Brantford, Ont.
- J. Walshaw & Son, Ltd., Bolton, Ont.

BLASTING ACCESSORIES

- Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER

- *Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS

- *The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

BOATS OF ALL KINDS

- Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOBBINS

- Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

BOILER COMPOUND

- Beveridge Supply Co., Limited, Montreal, Que.

BOILER COMPOUND AND OILS

- Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILER GRAPHITE

- Black Donald Graphite Company, Limited, Calabogie, Ont.

BOILER LININGS AND COVERINGS

- Beveridge Supply Co., Ltd., Montreal, Que.

BOILERS

- *Canadian Mead Morrison Co., Ltd., Montreal, Que.
- *Goldie & McCulloch Co., Limited, Galt, Ont.
- *E. Leonard & Sons, Ltd., London, Ont.
- J. & R. Weir, Montreal, Que.
- Taylor-Forbes Co., Ltd., Guelph
- *The Watrous Engine Works Co., Ltd., Brantford, Ont.
- BOILERS, hot water or steam
- Warden King, Ltd., Montreal.

BOILERS, steam

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, steam and brass work

- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BOLTS AND NUTS

- *The Canadian Tube & Iron Co., Ltd., Montreal, Que.
- *The National Acme Mfg. Co., Montreal, Que.
- *The Steel Company of Canada, Ltd., Hamilton, Ont.

BOOKBINDERS

- *The Brown Bros., Ltd., Toronto.

BOOKCASES

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

BOOKCASES, sectional (Gunn)

- The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKS, blank

- *The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES

- Ames-Holden-McCreedy, Limited, Montreal, Que.
- J. Leckie Co., Ltd.
- The John Ritchie Co., Ltd., Quebec, Que.

BOXES, cellular and fibre board

- *Hinde & Dauch Paper Co. of Canada, Limited, Toronto.

- *Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

BOXES, rattle and soap

- The Arlington Co. of Canada, Ltd., Toronto, Ont.

BOXES, steel shop

- *Steel Trough and Machine Co., Ltd., Tweed, Ont.

BOXES AND SHOOKS, wooden

- The C. Beck Mfg. Co., Ltd., Penatanguishene, Ont.

BOXES, wooden

- Barchard & Co., Ltd., Toronto.

BRAKE SHOES

- *Canadian Hart Wheels, Limited, Hamilton, Ont.

BRANDS, burning

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS AND BRONZE WIRE

- *Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

BRASS ENGRAVERS

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS

- *The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- Sully Brass Foundry, Limited, Toronto
- *Tallman Brass & Metal, Ltd., Hamilton, Ont.

BRASS GOODS

- *The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
- *The Kerr Engine Co., Limited, Walkerville, Ont.

BRASS RODS, SHEETS AND PLATES

- *Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

BRASS SHEETS AND PLATES

- *Copper Products, Ltd., Montreal, Que.

BRASS TUBING, seamless

- Canadian Seamless Wire Co., Ltd., Toronto, Ont.
- *Copper Products, Ltd., Montreal, Que.

BRASS WIRE

- Canadian Seamless Wire Co., Ltd., Toronto.

BRASS WORK, church

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special

- *Booth-Coulter Copper & Brass Co., Ltd., Toronto.
- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BRICK

- National Brick Co. of Laprairie, Laprairie, Que.
- Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel

- National Brick Co. of Laprairie, Laprairie, Que.

BRICK, pressed

- National Brick Co. of Laprairie, Laprairie, Que.

BRICK, rubbing

- *Canadian Hart Wheels, Limited, Hamilton, Ont.

BRICK, sewer.

- National Brick Co. of Laprairie, Laprairie, Que.

BRIDGES, Railway and Highway

- *Canadian Des Moines Steel Co., Limited, Chatham.
- *Hamilton Bridge Works Co., Ltd., Walkerville, Ont.
- *The Canadian Bridge Co., Ltd., Hamilton, Ont.
- *McGregor & McIntyre, Ltd., Toronto, Ont.
- *Dominion Bridge Co., Montreal.
- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.

BROOMS

- Simms, T. S., & Co., Limited, St. John, N.B.
- Stevens-Hepner Co., Limited, Port Elgin, Ont.

BRONZE SHEETS, RODS, PLATES

- *Brown's Copper and Brass Rolling Mills, Ltd., New Toronto, Que.
- *Copper Products, Ltd., Montreal.

BRONZE TUBING, seamless

- *Copper Products, Ltd., Montreal, Que.

BRUSHES

- Simms, T. S., & Co., Limited, St. John, N.B.
- Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon

- *Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS

- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.
- *The Bennett & Wright Co., Ltd., Toronto, Ont.

BUILDING FELT AND PAPER

- Beveridge Supply Co., Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
- *The Barrett Co., Ltd., Toronto and Montreal.

BUNGS, wooden for barrels

- Wm. H. White, Ville St. Pierre, Montreal, Que.

BUCKLES, shoe and coat

- Parmenter & Bulloch Co., Limited, Gananoque, Ont.

BURLAPS

- The Canadian Bag Co., Limited, Montreal, Que.

BURLAPS, decorative

- Dominion Oil Cloth and Linoleum Co., Limited, Montreal, Que.

CABLES, electric light, power, telephone and telegraph

- *Northern Electric Company, Limited, Montreal, Que.
- *Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

CABLES, wire

- *The Dominion Wire Rope Co., Ltd., Montreal, Que.
- *The B. Greening Wire Co., Ltd., Hamilton, Ont.

CALENDARS, ADVERTISING

- NOVELTIES, etc.
- Lawson & Jones, Ltd., London.

CAMERAS

- Canadian Kodak Co., Ltd., Toronto, Ont.

CAMPERS' OUTFITTERS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANADA SILVER

- *Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

CANOEES

- Peterboro Canoe Co., Ltd., Peterboro, Ont.
- The "Canadian" Canoe Co., Ltd., 216 Rink St., Peterborough, Ont.

CANS, baking powder, etc.

- American Can Co., Montreal (Que.) and Hamilton (Ont.).
- A. R. Whittall Can. Co., Ltd., Montreal, Que.
- *MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, fruit

- American Can Co., Montreal (Que.) and Hamilton (Ont.).
- A. R. Whittall Can. Co., Ltd., Montreal, Que.
- *MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, iron, lead and putty

- A. R. Whittall Can. Co., Ltd., Montreal, Que.

CANS, tin

- A. R. Whittall Can. Co., Ltd., Montreal, Que.
- American Can Co., Montreal (Que.) and Hamilton (Ont.).
- *MacDonald Mfg. Co., Ltd., Toronto, Ont.

CAPS, cloth

- John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE

- *Canada Carbide Co., Ltd., Montreal, Que.

CARBONS-PROJECTOR

- *Canadian National Carbon Co., Toronto, Ont.

CARBONIC ACID GAS

- *Canadian Carbonate Co., Montreal.

CARD RECORD SYSTEMS

- Lowe-Martin Co., Ltd., Ottawa, Ont.
- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

CARPETS AND RUGS

- Toronto Carpet Mfg. Co., Limited, Toronto.

CARRIERS

- *Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARRIERS, box and barrel

- *Canadian Mathews Gravity Carrier.

CARRIERS, brick

- *Canadian Mathews Gravity Carrier Co., Limited, Toronto.
- *Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS

- *National Steel Car Co., Ltd., Hamilton, Ont.

CARS, industrial

- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.

CARTONS, lithographed

- Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
- Harris Lithographing Co., Ltd., Toronto, Ont.

CASTINGS, Alloy

- *The Electric Steel & Metals Co., Ltd., Welland, Ont.

CASTINGS, aluminum, brass and bronze

- *Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- Sully Brass Foundry, Limited, Toronto.

CASTINGS, grey iron

- *Canadian Rumely Co., Ltd., Toronto, Ont.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CASTINGS, malleable iron

- *Galt Malleable Iron Co., Ltd., Galt, Ont.
- Mapleleaf Manufacturing Company, Smith's Falls, Ont.

CASTINGS, steel

- Beauchemin & Fils, Ltd., Sorel, Que.
- *Canadian Steel Foundries, Ltd., Montreal, Que.
- *Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
- *Electric Steel & Metals Co., Ltd., Welland, Ont.
- *Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS

- Grip, Ltd., Toronto, Ont.

CATALOGUE COVERS, by new lithographing process

- Harris Lithographing Co., Ltd., Toronto, Ont.

CAUSTIC SODA

- *Canadian Salt Co., Ltd., Windsor.

CEMENT WATERPROOFING

- *Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

CEMENTS, High Temp.; plastic, liquid

- Beveridge Supply Co., Limited, Montreal, Que.

CENTRIFUGAL PUMPS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

CHAINS, for elevators, conveyors and drives

- *Canadian Link-Belt Company, Ltd., Toronto, Ont.

CHAIRS

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

CHAIRS; Folding and Assembly Seating

- Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered

- Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS

- Canadian Laboratory Supplies, Ltd., Toronto, Ont.
- *The Grasselli Chemical Co., Ltd., Toronto, Ont.
- *The Nichols Chemical Co., Ltd., Montreal, Que.

CHEMISTS, industrial

- *Milton Hersey Co., Montreal.

CHICLETS AND CHEWING GUM

- Canadian Chewing Gum Co., Ltd., Toronto, Ont.

CIRCULAR CUTTERS, solid steel

- *Galt Knife Co., Ltd.
- The Peter Hay Knife Co., Ltd., Galt, Ont.

CIRCULAR SAWS

- *E. C. Atkins & Co., Inc., Hamilton, Ont.

CLAM SHELL BUCKETS

- *Canadian Mead Morrison Co., Ltd., Montreal, Que.

CLOCKS, time

- *International Business Machines Co., Ltd., Toronto, Ont.

CLOCKS, watchmen's

- *The Bennett & Wright Co., Ltd., Toronto, Ont.

CLOSET SEATS

- *Goderich Organ Co., Goderich, Ont.

CLOTHING

- John W. Leck & Co., Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats

- *A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw

- The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton

- Hamilton Cotton Co., Hamilton, Ont.

COAL

- *Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
- Standard Fuel Co., Toronto, Ont.

COBALT OXIDE

- *Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
- The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COBALT METAL

- *Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

COFFEE

- S. H. Ewing & Sons, Montreal.

COLD DRAWN SHAPES, flats, squares and hexagons

- *The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
- *Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS

- *John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS

- The Arlington Co. of Canada, Ltd., Toronto, Ont.

COLLARS, Composition

- Parsons & Parsons Canadian Co., Hamilton, Ont.

COLORS

- *A. Ramsay & Son Co., Montreal.

COMBS, fine dressing and name

- The Arlington Co. of Canada, Ltd., Toronto.

COMMERCIAL STATIONERY

- *Brown Bros., Ltd., Toronto, Ont.

CONCRETE COATINGS, PAINTS, Etc.

- *The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

CONCRETE HARDENER AND WATERPROOFER

- Beveridge Supply Co., Limited, Montreal, Que.
- Sturgeons Limited, Toronto.

CONDENSERS, Barometric

- *Canadian Ingersoll-Rand Co., Sherbrooke, Que.

CONDENSERS, jet and surface

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

CONDENSERS, rotary jet

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

CONDUIT FOR INTERIOR WIRING

- *Conduits Co., Ltd., Toronto, Ont.
- *National Conduit Co., Limited, Toronto.

- CONFECTIONERY**
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Ltd., Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.
- CONTAINER BOARD**—strong container
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
- CONTRACTOR'S PLANT**
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
- CONVEYORS**
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto.
- COPPER**
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.
- COPPER, SHEETS, PLATES, BARS, RODS**
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Copper Products, Ltd., Montreal, Que.
- COPPERSMITHS**
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- COPPER TUBING, seamless**
*Copper Products, Ltd., Montreal, Que.
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- COPPER WIRE**
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
- CORKS**
S. H. Ewing & Sons, Montreal, Que.
- CORK CARPET**
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.
- CORRUGATED PAPER BOXES**
Corrugated Paper Box Co., Ltd., Toronto, Ont.
*Hinde & Dauch Paper Co. of Canada, Limited Toronto.
Standard Paper Box Company, Ltd., Montreal, Que.
*Thompson & Norris Co. of Canada, Ltd., Toronto and Montreal.
- CORSETS**
Dominion Corset Co., Quebec, Que.
- COTTONS**
*Montreal Cottons, Ltd., Valleyfield, P.Q.
- COTTONADES**
Hamilton Cotton Co., Hamilton, Ont.
- COUPLERS**
*Canadian Steel Foundries, Ltd., Welland, Ont.
- CRANES**
*Northern Crane Works, Walkerville, Ont.
*The Herbert Morris Crane and Hoist Co., Ltd., Niagara Falls, Ont.
- CREAM CHEESE, Ingersoll**
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
- CREAM SEPARATORS AND MILK CLARIFIERS**
De Laval Dairy Supply Co., Peterboro, Ont.
- CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES**
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
- CREOSOTED MATERIALS**
*The Barrett Co., Ltd., Toronto and Montreal.
- CRUSHERS, Rock and Ore**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- CUPOLAS**
*Northern Crane Works, Ltd., Walkerville, Ont.
- CUPS, presentation**
Standard Silver Co., Toronto, Ont.
- CURTAINS, chenille**
Hamilton Cotton Co., Hamilton, Ont.
- CUTLERY**
Standard Silver Co., Toronto, Ont.
- CUTTERS, machine**
*Pratt & Whitney Co., Dundas, Ont.
- DECALCOMANIA TRANSFERS**
Canada Decalcomania Co., Toronto, Ont.
- DENIMS**
Hamilton Cotton Co., Hamilton, Ont.
- DERAILS**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- DESIGNERS AND PRINTERS OF BOOKLETS, Etc.**
Grip, Ltd., Toronto, Ont.
- DESKS**
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
The Macey Office Equipment Co., Toronto.
- DIE CASTINGS**
*Tallman Brass & Metal, Limited Hamilton, Ont.
- DIES**
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.
- DIES, for metal stampings.**
Larsen & Shaw, Ltd., Walkerton.
- DINING ROOM SUITES**
The George McLagan Furniture Co., Ltd., Stratford, Ont.
- DISINFECTING APPARATUS**
Sprimotor Co., London, Ont.
- DOOR HANGERS**
*Richards Wilcox Canadian Co., Ltd., London, Ont.
- DREDGES**
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
- DRILL PRESSES**
*Canada Machinery Corporation, Ltd., Galt, Ont.
- DRILL SHARPENERS**
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
- DRILLS**
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*Pratt & Whitney Co., Dundas, Ont.
- DRIFT BOLTS OR SPIKES**
London Rolling Mill Co., Ltd., London, Ont.
- DROP HAMMERS**
*Canada Machinery Corporation, Ltd., Galt, Ont.
- DRUMS, steel, and containers**
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
- DRY COLORS**
*The Imperial Varnish & Color Co., Ltd., Toronto.
- DUMB WAITERS**
Turnbull Elevator Mfg. Co., Toronto, Ont.
- DURABLE WIRE ROPE**
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
- DYNAMITE**
Canadian Explosives, Ltd., Montreal, Que.
- DYNAMOS**
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
- DYNAMOS, plating**
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
- EIDERDOWN**
Galt Knitting Co., Ltd., Galt, Ont.
- ELECTRICAL AND GAS FIXTURES**
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal, Ltd., Hamilton, Ont.
- ELECTRIC APPLIANCES**
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
- ELECTRICAL COMPOUNDS**
Standard Paint Co. of Canada, Ltd., Montreal, Que.
- ELECTRIC PLATE WARE**
Roden Bros., Ltd., Toronto, Ont.
- ELECTRODES, carbon**
*Canadian National Carbon Co., Ltd., Toronto, Ont.
- ELECTROTYPING**
Central Press Agency, Ltd., Toronto.
- ELECTRICAL SUPPLIES**
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Northern Electric Co., Ltd., Montreal, Que.
- ELECTRO-SILVER PLATED WARE**
Standard Silver Co., Toronto, Ont.
- ELEVATING MACHINERY**
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
- ELEVATORS**
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
Turnbull Elevator Mfg. Co., Toronto, Ont.
*The Watrous Engine Works Co., Ltd., Brantford, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.
- ELEVATORS FOR ALL PURPOSES**
*The Watrous Engine Works Co., Ltd., Brantford, Ont.
- ELEVATOR GATES AND DOORS**
Turnbull Elevator Mfg. Co., Ltd., Toronto, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
- ELEVATOR GUARDS**
*The Geo. B. Meadows, Toronto.
Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*Canada Wire and Iron Goods Co., Hamilton, Ont.
- EMERY GRINDERS**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- EMERY WHEELS**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- ENAMELS**
Dominion Paint Works, Limited, Walkerville, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
- ENAMEL AND TIN WARE**
*McClary Mfg. Co., London, Ont.
- ENGINES**
*E. Leonard & Sons, Limited, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*The Watrous Engine Works Co., Ltd., Brantford, Ont.
- ENGINES, gas and gasoline**
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Hamilton Motor Works, Ltd., Hamilton, Ont.
*Massey-Harris Co., Ltd., Toronto.
- ENGINES, gasoline, tractor, plowing and threshing**
Sawyer-Massey Co., Ltd., Hamilton, Ont.
- ENGINES, hoisting**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*The Watrous Engine Works Co., Ltd., Brantford, Ont.
- ENGINES, marine, gasoline and kerosene**
Bruce, Stewart & Co., Ltd., Charlottetown, P.E.I.
- ENGINES, steam plowing and threshing**
Sawyer-Massey Co., Ltd., Hamilton, Ont.
- ENGRAVERS, photo**
Grip, Ltd., Toronto, Ont.
- ENGRAVERS, half-tone**
Grip, Ltd., Toronto.
- ENGRAVERS AND PRINTERS steel plate**
American Bank Note Co., Ottawa, Ont.
- ENGRAVERS AND PRINTERS bank note**
American Bank Note Co., Ottawa, Ont.
- ENGRAVING**
*J. L. Jones Engraving Co., Toronto, Ont.
- ENGRAVING, copper and steel plate**
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.
- ENSILAGE AND STRAW CUTTERS**
J. Fleury's Sons, Aurora, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
- ENVELOPES**
*Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.
- EXPANSION BOLTS**
Beveridge Supply Co., Limited, Montreal, Que.
- EXPERTS IN PATENT CAUSES**
*Ridout & Maybee, Toronto, Ont.
- EXPLOSIVES, high**
Canadian Explosives, Ltd., Montreal, Que.
- FACE PLATE JAWS**
*Ker & Goodwin, Brantford, Ont.
- FACTORY SUPPLIES, cheese and creamery**
De Laval Dairy Supply Co., Ltd., Montreal, Que.
- FANS**
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
- FENCING, wire**
*C. H. Johnson & Sons, Ltd., Montreal, Que.
- FELTS, pulp and paper makers**
Ayers, Ltd., Lachute Mills, P.Q.
- FENCES AND GATES**
*Dennis Wire & Iron Works Co., London, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Frost Steel & Wire Company, Limited, Hamilton, Ontario.
- FIBRE PAIRS**
*The E. B. Eddy Co., Ltd., Hull, Que.
- FIBRE (vulcanized), sheets, rods, tubes, etc.**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- FIREBRICK, Plastic, jointless**
Beveridge Supply Co., Limited, Montreal, Que.
- FILES.**
Henry Disston & Sons, Ltd., Toronto, Ont.
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The Nicholson File Co., Port Hope.
The Ingersoll File Company, Ltd., Ingersoll, Ont.
- FILING CABINETS**
*Office Specialty Co., Newmarket, Ont.
- FILING DEVICES**
The Macey Office Equipment Co., Toronto.
- FILING EQUIPMENT, wood & steel**
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
- FILING SYSTEMS**
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
Lowe-Martin Co., Ltd., Ottawa, Ont.
- FILMS, MOTION PICTURE**
Filmcraft Industries, Limited, Toronto, Ont.
- FIRE ALARMS**
*Northern Electric Co., Ltd., Montreal, Que.

FIRE BRICK

Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.

FIRE BRICK AND CLAY

Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.

FIRE BRICK, PLASTIC

Beveridge Supply Co., Limited, Montreal, Que.

FIRE DOOR HARDWARE

*Richard Wilcox Canadian Co., Ltd., London, Ont.

FIRE DOORS

*A. B. Ormsby Co., Ltd., Toronto
*The Pedlar People, Ltd., Oshawa, Ont.

FIRE ENGINES

American LaFrance Fire Engine Company of Canada, Limited, Toronto.

*Watrous Engine Works Co., Ltd., Brantford, Ont.

FIRE ESCAPES

American LaFrance Fire Engine Company of Canada, Limited, Toronto.

*Canada Wire & Iron Goods Co., Hamilton, Ont.

*Dennis Wire & Iron Works Co., London, Ont.

*McGregor & McIntyre, Ltd., Toronto, Ont.

FIRE EXTINGUISHERS

*A. B. Ormsby Co., Ltd., Toronto.
American LaFrance Fire Engine Company of Canada, Limited, Toronto.

*Booth-Coulter Copper & Brass Co., Ltd., Montreal, Que.

*The Bennett & Wright Co., Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS

American LaFrance Fire Engine Company of Canada, Limited, Toronto.

*Watrous Engine Works Co., Ltd., Brantford, Ont.

FIRE HOSE

*Canadian Consolidated Rubber Co. of Canada, Ltd., Montreal, Que.

*Gutta Percha & Rubber, Ltd., Toronto, Ont.

FIRE PREVENTION MATERIAL

*Chicago Bridge & Iron Works Bridgeburg, Ont.

*Eureka Mineral Wool & Asbestos Co., Toronto.

*The Bennett & Wright Co., Ltd., Toronto, Ont.

FIRE-PROOF WINDOWS AND DOORS

*Canadian Metal Window & Steel Products, Limited, Toronto.

*A. B. Ormsby Co., Ltd., Toronto.

*Pedlar People, Ltd., Oshawa, Ont.

*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

FIRE PROTECTION SYSTEMS

*Canadian Des Moines Steel Co., Limited, Chatham.

FIRE SPRINKLER SYSTEMS

*Chicago Bridge & Iron Works, Bridgeburg, Ont.

*The Bennett & Wright Co., Ltd., Toronto, Ont.

*Purdy Mansell Co., Toronto, Ont.

FIRE AND WATER DEPARTMENT

*Chicago Bridge & Iron Works, Bridgeburg, Ont.

The Garth Co., Montreal, Que.

FISH, Atlantic Sea-Foods
Maritime Fish Corporation, Ltd., Montreal, Que.

FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
Warden King Ltd., Montreal, Que.

FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.

FOLDING PAPER BOXES
Standard Paper Box Company, Ltd., Montreal, Que.

FORGES

*Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

FORGINGS

*Canada Foundries & Forgings Co., Welland, Ont.

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

FORGINGS, drop
*Dominion Forge & Stamping Co., Walkerville, Ont.

FOUNDRY EQUIPMENT

*Northern Crane Works, Ltd., Walkerville, Ont.

FOUNTAIN FRUITS AND JUICES

J. J. McLaughlin, Ltd., Toronto.

FROGS AND CROSSINGS, manganese

Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL

Standard Fuel Co., Toronto, Ont.

FUR GARMENTS, men's and women's

Holt, Renfrew, Ltd., Quebec.

FUR GOODS

John W. Peck & Co., Ltd., Montreal, Que.

FURNACES

*McClary Mfg. Co., London, Ont.

FURNITURE; Camp and Verandah and Novelties

The Stratford Mfg. Co., Limited, Stratford, Ont.

FURNITURE, hall

The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, office

The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan

Imperial Rattan Co., Ltd., Stratford, Ont.

FUSES

*Economy Fuse & Mfg. Co., Montreal, Que.

GALVANIZED IRON

*A. C. Leslie & Co., Montreal.

GALVANIZED SHEETS

*Dominion Sheet Metal Co., Hamilton, Ont.

*The A. B. Ormsby Co., Ltd., Toronto, Ont.

GALVANIZERS

Acme Stamping & Tool Works, Ltd., Hamilton, Ont.

*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

*The Pedlar People, Ltd., Oshawa.

GALVANIZING, custom

The Gould, Shapley & Muir Co., Ltd., Brantford, Ont.

GASOLINE ENGINES

*Ontario Wind & Pump Co., Ltd., Toronto, Ont.

De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

*The Gould Shapley & Muir Co., Limited, Brantford, Ont.

GASOLINE FIRE ENGINES

American LaFrance Fire Engine Company of Canada, Limited, Toronto.

*Watrous Engine Works Co., Ltd., Brantford, Ont.

GASOLINE STORAGE SYSTEMS, special underground

*S. F. Bowser & Co., Toronto.

*Steel Trough & Machine Co., Ltd., Tweed, Ont.

GASOLINE

*The Imperial Oil Co., Ltd., Toronto, Ont.

GEARS, cut

*Hamilton Gear and Machine, Toronto.

GEARS (noiseless, waterproof)

*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

GELATINE

Canada Gelatine Co., Ltd., Brantford, Ont.

GENERATORS

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

GILDING METAL

*Copper Products, Ltd., Montreal, Que.

GLASSWARE

Dominion Glass Co., Ltd., Montreal, Que.

GLASSWARE, cut

Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS

Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

GLASS BENDERS

Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

GLASS, mirror

Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

GLOVES AND MITTS

*A. R. Clarke & Co., Ltd., Toronto.
Craig, Cowan Co., Ltd., Toronto.

GLUE

Canada Glue Co., Ltd., Brantford, Ont.

GOLD-FILLED WIRE AND PLATE

Canadian Seamless Wire Co., Toronto, Ont.

GOLD AND SILVER REFINERS

Canadian Seamless Wire Co., Toronto, Ont.

GRAIN CRUSHERS, rapid, easy

J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE

J. J. McLaughlin, Ltd., Toronto.

The Welch Co., Ltd., St. Catharines, Ont.

GRAPHITE, lubricating

Black Donald Graphite Company, Limited, Calabogie, Ont.

GRATES

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

GRAVITY CARRIERS

*Canadian Mathews Gravity Carrier Co., Toronto, Ont.

GRILLES, metal

*Canada Wire & Iron Goods Co., Hamilton, Ont.

*Dennis Wire & Iron Works Co., London, Ont.

GRINDING MACHINERY

*Ford Smith Machine Co., Ltd., Hamilton, Ont.

*Norton Company of Canada, Ltd., Hamilton, Ont.

GRINDING AND POLISHING MACHINERY

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING WHEELS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

*Norton Company of Canada, Ltd., Hamilton, Ont.

*The Dominion Abrasive Wheel Co., Ltd., New Toronto, Ont.

GRINDSTONES

*Richards-Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES

The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

GUY ANCHORS

B. J. Coghlin Co., Ltd., Montreal.

GYPSUM PRODUCTS

De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HACK SAW BLADES AND FRAMES

*E. C. Atkins & Co., Inc., Hamilton, Ont.

HACK SAW MACHINES

*E. C. Atkins & Co., Inc., Hamilton, Ont.

HALL FURNITURE

The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HANDLES (axe, pick, sledge hammers, etc.)

The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

HANDLES, wood

Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

HAND SAWS

*E. C. Atkins & Co., Inc., Hamilton, Ont.

HANGERS

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

HARDWARE

*Richards-Wilcox Canadian Co., Ltd., London, Ont.

Taylor-Forbes Co., Ltd., Guelph, Ont.

HARNESSES

Lamontagne, Ltd., Montreal, Que.

HATS, ladies' felt and straw

Toronto Hat Mfg. Co., Toronto.

HAULAGE, wire rope

*The Dominion Wire Rope Co., Ltd., Montreal, Que.

HEADING SAWS

*E. C. Atkins & Co., Inc., Hamilton, Ont.

HEATERS

*Watrous Engine Works Co., Ltd., Brantford, Ont.

HEATERS, feed water

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

HEATERS, WATER FEED

*Mason Regulator & Engineering Co., Ltd., Montreal, Que.

HEATING APPLIANCES

*C. A. Dunham Co., Ltd., Toronto.

*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

HEATING SYSTEMS

*C. A. Dunham Co., Ltd., Toronto.

HEMLOCK, union and oak sole

Breithaupt Leather Co., Ltd., Kitchener, Ont.

HESSIANS

The Canadian Bag Co., Ltd., Montreal, Que.

HINGES

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

HOISTS, electric and pneumatic

*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

*Canadian Mead Morrison Co., Ltd., Montreal, Que.

*Northern Crane Works, Ltd., Walkerville, Ont.

HOSE, fire and rubber

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

*Gutta Percha & Rubber, Ltd., Toronto, Ont.

HOUSES, factory made

Wm. H. White, Ville St. Pierre, Montreal, Que.

HYDRAULIC TURBINES

*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

ICE CREEPERS

Parmenter & Bullock Co., Ltd., Gananoque, Ont.

ICE MACHINE EQUIPMENT

Canadian Ice Machine Co., Limited, Toronto, Ont.

ICE-MAKING MACHINERY

The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INGOT METALS

*Brown's Copper & Brass Rolling Mills, Ltd., New Toronto, Ont.

INSERTED TOOTH SAWS

*E. C. Atkins & Co., Inc., Hamilton, Ont.

INSULATING COMPOUNDS

*The Imperial Varnish & Color Co., Ltd., Toronto.

INSULATION VULCANIZED FIBRE

*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

INTERLOCKING RUBBER TILING

*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto, Ont.

IRON

*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON AND STEEL BARS

*Burlington Steel Co., Ltd., Hamilton, Ont.

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

IRON STAIRWAYS

*Canada Wire & Iron Goods Co., Hamilton, Ont.

*Dennis Wire & Iron Works Co., London, Ont.

*McGregor & McIntyre, Ltd., Toronto, Ont.

IRONWORK, architectural

*Canada Wire & Iron Goods Co., Hamilton, Ont.

IRONWORK, ornamental

*Canada Wire & Iron Goods Co., Hamilton, Ont.

JAM, canned goods, etc.

E. D. Smith & Son, Ltd.

JAPANS, enamels, etc.

A. Muirhead Co., Ltd., Toronto.

*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

JELLY POWDER

S. H. Ewing & Sons, Montreal.
JEWELRY, enamelled souvenir
 *Caron Bros., Montreal, Que.
JEWELRY, gold-filled
 *Caron Bros., Montreal, Que.

JOINTERS

*Canada Machinery Corporation,
 Ltd., Galt, Ont.
 *P. B. Yates Machine Co., Ltd.,
 Hamilton, Ont.

JOIST HANGERS

*Richards - Wilcox Canadian Co.,
 Ltd., London, Ont.

JUNCTION BOXES, cable

*Standard Underground Cable Co.
 of Canada, Ltd., Hamilton, Ont.

KINDLING

Standard Fuel Co., Toronto, Ont.

KNIFE GRINDERS

*Canada Machinery Corporation
 Ltd., Galt, Ont.

KNITTED GOODS

*Penman's, Ltd., Paris, Ont.

KNIVES

*Galt Knife Co., Ltd.
 The Peter Hay Knife Co., Ltd.,
 Galt, Ont.
 Simonds Canada Saw Co., Ltd.,
 Montreal, Que.

KNIVES, pulp and paper

Henry Disston & Sons, Toronto.
 The Peter Hay Knife Co., Ltd.,
 Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES

Canadian Kodak Co., Ltd., To-
 ronto.

LABELS

Lawson & Jones, Ltd., London,
 Ont.

LABELS, lithographed

Consolidated Lithographing and
 Mfg. Co., Ltd., Montreal, Que.
 Harris Lithographing Co., Ltd.,
 Toronto, Ont.

LABORATORY SUPPLIES

Canadian Laboratory Supplies
 Ltd., Toronto.

LACE LEATHER

F. C. McCordick, St. Catharines
 Ont.

*The D. K. McLaren Belting Co.
 Ltd., Montreal, Que.

*The J. C. McLaren Belting Co.,
 Ltd., Montreal, Que.

LADDERS

Stratford Mfg. Co., Ltd., Strat-
 ford, Ont.

LADLES, foundry

*Northern Crane Works, Ltd.,
 Walkerville, Ont.

LATH

The C. Beck Mfg. Co., Ltd., Pene-
 tanguishene, Ont.

LATHE CHUCKS

*Ker & Goodwin, Brantford, Ont.

LATHES

*Canada Machinery Corporation
 Ltd., Galt, Ont.

LAUNCHES

Peterboro Canoe Co., Ltd., Peter-
 boro, Ont.

LAWN MOWERS

Taylor-Forbes Co., Ltd., Guelph
 Ont.

LAWN SWINGS

Stratford Mfg. Co., Ltd., Strat-
 ford, Ont.

LAVATORIES, enameled

Amherst Foundry Co., Ltd., Am-
 herst, N.S.

LAUNDRY SINKS

Amherst Foundry Co., Ltd., Am-
 herst, N.S.

LEAD

*Consolidated Mining & Smelting
 Co. of Canada, Ltd., Montreal.

LEAD GRINDERS

Benjamin Moore & Co., Ltd., To-
 ronto, Ont.

LEAD PIPE

*Hoyt Metal Co., Toronto, Ont.

*The Steel Co. of Canada, Ltd.,
 Hamilton, Ont.

Toronto Plate Glass Importing
 Co., Ltd., Toronto, Ont.

*The Canada Metal Co., Toronto.

LEAD SHEET

Toronto Plate Glass Importing
 Co., Ltd., Toronto, Ont.

LEATHER

The Robson Leather Co., Ltd.,
 Oshawa, Ont.

LEATHER, bookbinders'

Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy

Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS

Lamontagne, Ltd., Montreal, Que.

LEATHER GOODS, Fine

Federated Leather Goods Co.,
 Ltd., Montreal, Que.

Canadian Leather Products, Ltd.,
 Toronto, Ont.

LEATHER, hemlock, union and oak
 sole

The Breithaupt Leather Co., Ltd.,
 Kitchener, Ont.

LEATHER, patent calf and side
 leather

*A. R. Clarke & Co., Ltd., Toronto

LEATHER, sheep skin, etc.
 Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering
 Clarke & Clarke, Ltd., Toronto.

LEATHER, upper
 A. Davis & Son, Ltd., Kingston,
 Ont.

King Brothers Co., Ltd., Whitby,
 Ont.

LINK-BELT, Ewart and saw mill
 riveted

*Canadian Link-Belt Co., Toronto

LINOLEUM
 Dominion Oil Cloth and Linoleum
 Co., Ltd., Montreal, Que.

LITHOGRAPHERS

American Bank Note Co., Ottawa,
 Ont.

Consolidated Lithographing and
 Mfg. Co., Ltd., Montreal, Que.

Harris Lithographing Co., Ltd.,
 Toronto, Ont.

The Federated Press, Limited,
 Montreal, Que.

LOCKERS

*Canada Wire & Iron Goods Co.,
 Hamilton, Ont.

*Dennis Wire & Iron Works Co.,
 London, Ont.

*Geo. B. Meadows, Wire, Iron and
 Brass Works Co., Toronto, Ont.

LOCOMOTIVES, industrial

*Montreal Locomotive Works, Ltd.,
 Montreal, Que.

LOCOMOTIVE & MARINE BRASS WORKS

The James Morrison Brass Mfg.
 Co., Ltd., Toronto.

LOOSE LEAF SYSTEMS

Copeland - Chatterson Co., Ltd.,
 Brampton, Ont.

Lowe-Martin Co., Ottawa, Ont.

LUGS, for silos and water tanks
 *Ontario Wind Engine & Pump
 Co., Ltd., Toronto.

LUMBER

The C. Beck Mfg. Co., Ltd., Pene-
 tanguishene, Ont.

LUMBER, asbestos

*Eureka Mineral Wool & Asbestos
 Co., Toronto, Ont.

LUMBER, spruce and pine, cedar
 railway ties and shingles

*Bathurst Lumber Co., Ltd., Bath-
 urst, N.B.

LUMBER, red pine and spruce
 Gillies Bros., Ltd., Braeside, Ont.

LUMBER, White pine
 Gillies Bros., Ltd., Braeside, Ont.

LUMBERING BLANKETS

Slingsby Mfg. Co., Ltd., Brantford,
 Ont.

MACHINE KNIVES

*Galt Knife Co., Ltd.

*E. C. Atkins & Co., Inc., Hamil-
 ton, Ont.

Henry Disston & Sons, Toronto.

MACHINE TOOLS

*Canada Machinery Corporation,
 Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd.,
 Dundas, Ont.

MACHINE WORK, special and
 repairs

*Canadian Rumely Co., Ltd., To-
 ronto, Ont.

MACHINERY, special, designing
 and developing.

Larsen & Shaw, Ltd., Walkerton.

BAKERS

Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY AND UTENSILS FOR
CANDY

Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY AND UTENSILS FOR
ICE CREAM

Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY, conveying

*Canadian Link-Belt Company, Ltd.,
 Toronto, Ont.

*Canadian Mathews Gravity Carrier
 Co., Ltd., Toronto.

MACHINERY, flour mill

*Canadian Fairbanks-Morse Co.,
 Ltd., Montreal, Que.

MACHINERY, ice cream

J. J. McLaughlin, Ltd., Toronto.

MACHINERY, grinding

*Canadian Hart Wheels, Ltd.,
 Hamilton, Ont.

*Canadian Mead Morrison Co., Ltd.,
 Montreal, Que.

J. & R. Weir, Montreal, Que.

*Northern Crane Works, Ltd.,
 Walkerville, Ont.

MACHINERY, iron working

*Canada Machinery Corporation,
 Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd.,
 Dundas, Ont.

MACHINERY, pulp mill

*Canadian Ingersoll-Rand Co., Ltd.,
 Sherbrooke, Que.

*Dominion Engineering Works,
 Limited, Montreal, Que.

*The Watrous Engine Works Co.,
 Ltd., Brantford, Ont.

MACHINERY, punching and shearing
 *Canada Machinery Corporation,
 Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd.,
 Dundas, Ont.

MACHINERY, railroad and car-shop
 *Canada Machinery Corporation,
 Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd.,
 Dundas, Ont.

MACHINERY, roadmaking
 Sawyer-Massey Co., Ltd., Hamil-
 ton, Ont.

*The Watrous Engine Works Co.,
 Ltd., Brantford, Ont.

MACHINERY, sawmill

The E. Long Mfg. Co., Ltd.,
 Orillia, Ont.

P. Payette & Co., Pentanguishene,
 Ont.

*The Watrous Engine Works Co.,
 Ltd., Brantford, Ont.

*Yates, P. B., Machine Co., Ltd.,
 Hamilton, Ont.

MACHINERY, sheet metal working
 *Canada Machinery Corporation,
 Ltd., Galt, Ont.

MACHINERY, woodworking
 *Canada Machinery Corporation,
 Ltd., Galt, Ont.

*Yates, P. B., Machine Co., Ltd.,
 Hamilton, Ont.

Preston Woodworking Machinery
 Co., Ltd., Preston, Ont.

*The Watrous Engine Works Co.,
 Ltd., Brantford, Ont.

MACHINES, painting

Spramotor Co., London, Ont.

MAGNESITE

*Canadian Carbonate Co., Montreal,
 Que.

MALLEABLE IRON CASTINGS
 Malleable Castings Co., Ltd.,
 Smith's Falls, Ont.

*Galt Malleable Iron Co., Ltd.,
 Galt, Ont.

MARTINGALE RINGS AND SLIDE
LOOPS

The Arlington Co. of Canada, Ltd.,
 Toronto, Ont.

MATCHERS

*P. B. Yates Machine Co., Ltd.,
 Hamilton, Ont.

MATCHES

*The E. B. Eddy Co., Ltd., Hull,
 Que.

MECHANICAL STOKERS
 *Under-feed Stoker Co. of Canada,
 Ltd., Toronto.

METAL, babbitt

Alonso W. Spooner, Ltd., Port
 Hope, Ont.

*Canada Metal Co., Toronto, Ont.

METAL CEILING

*The Pedlar People, Ltd., Oshawa,
MACHINERY AND UTENSILS FOR
 Ont.

*The A. B. Ormsby Co., Ltd., To-
 ronto, Ont.

METAL LATH

*The Pedlar People, Ltd., Oshawa,
 Ont.

METAL LATH

*Trussed Concrete Steel Company
 of Canada, Ltd., Walkerville,
 Ont.

METAL PACKING

*Garlock Packing Co., Hamilton,
 Ont.

METAL, spinning and stamping
 *The Booth-Coulter Copper & Brass
 Co., Ltd., Toronto, Ont.

METAL PROTECTIVE PAINTS
 Sturgeons Limited, Toronto.

METAL SAWS

*E. C. Atkins & Co., Inc., Hamil-
 ton, Ont.

METAL SHINGLES

*The Pedlar People, Ltd., Oshawa,
 Ont.

*The A. B. Ormsby Co., Ltd., To-
 ronto, Ont.

MILK DEALERS' MACHINERY
AND SUPPLIES

De Laval Dairy Supply Co., Ltd.,
 Peterboro, Ont.

MILLBOARD, asbestos

*Eureka Mineral Wool & Asbestos
 Co., Toronto.

MILLING CUTTERS

*Pratt & Whitney Co. of Canada,
 Dundas, Ont.

MILLING MACHINES

*Ford Smith Machine Co., Ltd.,
 Hamilton, Ont.

MILL RIVETED

*Canadian Link-Belt Company, Ltd.,
 Toronto, Ont.

MITTS AND GLOVES, Indian, tan,
 red deerskins

Holt, Renfrew, Ltd., Quebec, Que.

*A. R. Clarke & Co., Ltd., Toronto.

MIXERS, chocolate, dough and paint
 Fletcher Mfg. Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS,
 Indian tanned leathers

Holt, Renfrew, Ltd., Quebec, Que.

MONEL METAL

*International Nickel Co. of Cana-
 da, Ltd., Toronto.

MORTISES

*Canada Machinery Corporation,
 Ltd., Galt, Ont.

*P. B. Yates Machine Co., Ltd.,
 Hamilton, Ont.

MOTION PICTURES

Pathescope of Canada, Limited,
 Toronto.

Filmcraft Industries, Limited,
 Toronto, Ont.

MOTOR CARS

*Ford Co. of Canada, Ford, Ont.

MOTORS, electric (alternating
 current)

*Canadian Westinghouse Co., Ltd.,
 Hamilton, Ont.

*Jones & Moore Electric Co., Ltd.,
 Toronto, Ont.

*Canadian Crocker-Wheeler Co.,
 Ltd., St. Catharines, Ont.

*T. & H. Electric Co., Hamilton, Ont.

MOTORS, electric (direct current)
 *Canadian Westinghouse Co., Ltd.,
 Hamilton, Ont.

*Jones & Moore Electric Co., Ltd.,
 Toronto, Ont.

*T. & H. Electric Co., Hamilton.

MOTORS, electric (repairing)
 *T. & H. Electric Co., Hamilton.

MOTOR TRUCKS

Mapleleaf Manufacturing Company, Ltd., Montre-
 al, Que.

MOULDERS

*Canada Machinery Corporation,
 Ltd., Galt, Ont.

*P. B. Yates Machine Co., Ltd.,
 Hamilton, Ont.

NAILS

*The Steel Co. of Canada, Ltd.,
 Hamilton, Ont.

NAILS, copper
 Parmenter & Bullock Co., Ltd.,
 Gananoque, Ont.

NAILS, wire
 Parmenter & Bullock Co., Ltd.,
 Gananoque, Ont.

NAPHTHA

*The Imperial Oil Co., Ltd., Toronto, Ont.

NICKEL CASTINGS

*International Nickel Co. of Canada, Ltd., Toronto.

NICKEL METAL

*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
*International Nickel Co. of Canada, Ltd., Toronto.

NICKEL OXIDE

*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*International Nickel Co. of Canada, Ltd., Toronto.

NUTS

*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The National Acme Mfg. Co., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

OAKUM, plumbers, Canadian Navy
Factory Waste & Metal Co., Montreal, Que.

OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.

OFFICE CHAIRS, Etc.

The Macey Office Equipment Co., Toronto.

OFFICE DESKS

*Goderich Organ Co., Goderich, Ont.

OFFICE EQUIPMENT

Lowe-Martin Co., Ltd., Ottawa, Ont.
*Office Specialty Co., Newmarket, Ont.

OFFICE FURNITURE

*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

OILS

*A. Ramsay & Son Co., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS

*S. F. Bowser & Co., Toronto, Ont.

OIL STORAGE SYSTEMS, self-measuring

*S. F. Bowser & Co., Toronto, Ont.

OIL COMPANIES

*Canadian Oil Cos., Toronto.
Commercial Oil Co., Ltd., Hamilton, Ont.

*Imperial Oil Co., Toronto.

OILS (petroleum products)

*British American Oil Co., Ltd., Toronto, Ont.

*The Imperial Oil Co., Toronto.

OILS, road

*The Barrett Co., Ltd., Toronto and Montreal.

OILCLOTHS, floor and table
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.

ORGANS

Casavant Freres, Limitee, St. Hyacinthe, Que.

*Goderich Organ Co., Goderich, Ont.

ORGANS, parlor

*Goderich Organ Co., Goderich, Ont.

ORGANS, pipe

Casavant Freres, Limitee, St. Hyacinthe, Que.

ORGANS, reed

Bell Piano & Organ Co., Ltd., Guelph, Ont.

ORNAMENTAL IRON WORK

*Canada Wire & Iron Goods Co., Hamilton, Ont.

*Dennis Wire & Iron Works Co., London, Ont.

*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.

*McGregor & McIntyre, Ltd., Toronto, Ont.

OVERALLS

Peerless Overall Co., Rock Island, Que.

Walker Pant & Shirt Co., Walkerville and Chatham, Ont.

OVERCOATINGS

Rosamond Woollen Co., Almonte, Ont.

OVERHEAD RUNWAYS

*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

*Richards-Wilcox Canadian Co. Ltd., London, Ont.

OXY-ACETYLENE WELDING

*L'Air Liquide Society, Montreal, Que.

*The Prest-O-Lite Co., Inc., Toronto

OXYGEN
*L'Air Liquide Society, Montreal, Que.

PACKING BOXES

Barchard & Co., Ltd., Toronto.

PACKING, engine

*Garlock Packing Co., Hamilton, Ont.

PACKING, Metallic-Flexible
Beveridge Supply Co., Ltd., Montreal, Que.

PACKING, rubber

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

*Gutta Percha & Rubber Mfg. Co. of Toronto, Ltd.

*Jenkins Bros., Ltd., Montreal, Que.

PAD HOOKS

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

PAIS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES

A. Muirhead Co., Ltd., Toronto.

PAINTS AND VARNISHES
A. Muirhead Co., Ltd., Toronto.

Benjamin Moore & Co., Ltd., Toronto, Ont.

Dominion Paint Works, Limited, Walkerville, Ont.

*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

The Staneland Co., Ltd., Victoria, B.C.

*A Ramsay & Sons Co., Montreal, Que.

Standard Paint Co. of Canada, Ltd., Montreal, Que.

PAINTS, preservative
Dominion Paint Works, Limited, Walkerville, Ont.

Standard Paint Co. of Canada, Ltd., Montreal, Que.

*The Barrett Co., Ltd., Toronto and Montreal.

PAPER BOARDS & BAGS
Beveridge Supply Co., Ltd., Montreal, Que.

PAPER BOXES

Standard Paper Box Company, Ltd., Montreal, Que.

King Paper Box Co., Ltd., Montreal, Que.

PAPER, coated, book and label
*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, coated box board
*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, coated cover
*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, envelope
*Provincial Paper Mills, Ltd., Georgetown, Ont.

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, enamelled blotting
*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, label
*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, ledger
*Howard Smith Paper Mills, Ltd., Montreal, Que.

*Rolland Paper Co., Ltd., Montreal, Que.

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, writing
The Toronto Paper Mfg. Co., Cornwall, Ont.

*Howard Smith Paper Mills, Ltd., Montreal, Que.

*Rolland Paper Co., Ltd., Montreal, Que.

PAPERS, bond

*Howard Smith Paper Mills, Ltd., Montreal, Que.

*Rolland Paper Co., Ltd., Montreal, Que.

PAPERS, building

*Bathurst Lumber Co., Ltd., Bathurst, N.B.

*The Riordon Pulp & Paper Co., Montreal, Que.

Standard Paint Co. of Canada, Ltd., Montreal, Que.

PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

PATENTS

Fetherstonhaugh & Co., Toronto.

*Ridout & Maybee, Toronto, Ont.

*Harold C. Shipman & Co., Ottawa.

PATENT LITIGATION
*Ridout & Maybee, Toronto, Ont.

*Harold C. Shipman & Co., Ottawa, Ont.

PAVING MATERIAL
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

PAY ROLL AUDITS
*International Business Machines, Ltd., Toronto, Ont.

PERFORATED METALS
*Canada Wire & Iron Goods Co., Hamilton, Ont.

PERFORATED MUSIC ROLLS
The Otto Higel Co., Ltd., Toronto.

PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes, Ltd., Toronto.

PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto, Ont.

PHOTO MAILERS
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

PHOTO PLAYS
Filmcraft Industries, Limited, Toronto, Ont.

PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.

PIANO KEYS
The Otto Higel Co., Ltd., Toronto.

PIANO, player actions
The Otto Higel Co., Ltd., Toronto.

PIANOS AND PLAYER PIANOS
Bell Piano & Organ Co., Ltd., Guelph, Ont.

PIANO STOOLS AND BENCHES
*Goderich Organ Co., Goderich, Ont.

PIG IRON
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

*M. A. Hanna & Co., Toronto.

*Algoma Steel Corporation.

PINS, society, emblems and badges
*Caron Bros., Montreal, Que.

PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto, Ont.

PIPE COUPLINGS
*The Steel Co. of Canada, Ltd., Hamilton, Ont.

PIPE COVERINGS
*Eureka Mineral Wood & Asbestos Co., Toronto, Ont.

PIPES, culvert
*The Pedlar People, Ltd., Oshawa, Ont.

PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer
Hamilton & Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.

PIPE, soil and fittings
Anthes Foundry, Ltd., Toronto and Winnipeg.

Warden King Ltd., Montreal, Que.

PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.

*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS
*Canada Machinery Corporation, Ltd., Galt, Ont.

*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

PLASTERING TROWELS
*E. C. Atkins & Co., Inc., Hamilton, Ont.

PLOWS
J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES

The Garth Co., Montreal, Que.

The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.

Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

PNEUMATIC DRILLS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

POLE LINE MATERIAL (wooden insulator top pins, side blocks, pole steps, cross arms)

The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

POLES, flag
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

POLISHING MACHINERY
*Ford Smith Machine Co., Ltd., Hamilton, Ont.

PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES
*Hydraulic Machinery Co., Ltd., Montreal, Que.

PRESSES, hydraulic
*The Hydraulic Machinery Co., Limited, Montreal.

PRESSES, sheet metal stamping
*Canada Machinery Corporation, Ltd., Galt, Ont.

PRESSES, veneer
*Canada Machinery Corporation, Ltd., Galt, Ont.

PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.

The Federated Press, Limited, Montreal, Que.

PRINTING & LITHOGRAPHIC INKS.
Charles Bush, Limited, Toronto.

PULLEYS
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

PULLEYS, Fibre
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

PULLEYS, wood split
*Bernard Industrial Co., Fortierville, P.Q.

PULP, bleached sulphite
*Riordan Sales Co., Ltd., Montreal.

PULP, unbleached sulphite
*Riordan Sales Co., Ltd., Montreal.

PULP, sulphate and sulphite
*Bathurst Lumber Co., Ltd., Bathurst, N.B.

PULP AND PAPER MILL MACHINERY
*The Hydraulic Machinery Co., Limited, Montreal.

PUMPS
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

*E. Leonard & Sons, Ltd., London, Ont.

*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

Spramotor Co., London, Ont.

*The Electric Steel & Metals Co., Ltd., Welland, Ont.

PUMPS, boiler feed
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

PUMPS, centrifugal
Ltd., Walkerville, Ont.

*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

*Canadian Mead Morrison Co., Ltd., Montreal, Que.

*Dominion Engineering Works, Limited, Montreal, Que.

*Dominion Forge & Stamping Co., Ltd., Galt, Ont.

*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

- PUMPS, hydraulic**
*The Hydraulic Machinery Co., Limited, Montreal.
- PUMPS, turbine and reciprocating**
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
- PUNCHES**
*Pratt & Whitney Co., Dundas, Ont.
- RADIATORS**
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.
- RAILS (STEEL)**
*Algoma Steel Corporation.
- RAILINGS, brass and iron**
*Dennis Wire & Iron Works Co., London, Ont.
- RAILWAY SUPPLIES**
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.
- READY-TO-WEAR GARMENTS, ladies'**
H. C. Boulter Co., Ltd., Toronto.
- REAMERS**
*Pratt & Whitney Co., Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.
- RECEPTACLES, fibre**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- REFRIGERATORS**
Sanderson-Harold Co., Ltd., Paris, Ont.
- REFRIGERATING MACHINERY**
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
- REFRIGERATING EQUIPMENT**
Canadian Ice Machine Co., Ltd., Toronto, Ont.
- REFRIGERATORS, store, homes and institutions**
Ham & Nott Co., Ltd., Brantford, Ont.
*John Hillock & Co., Ltd., Toronto.
- REINFORCEMENT BARS**
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- REINFORCED CONCRETE**
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
- REINFORCEMENT FOR CONCRETE**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
- REINFORCEMENT FOR CONCRETE ROOFING, metal**
*The Pedlar People, Ltd., Oshawa, Ont.
- REVOLVING DOORS**
*A. B. Ormsby Co., Ltd., Toronto.
- RINGS, gold**
*Caron Bros., Montreal, Que.
- RIVETS**
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- RIVETS, bifurcated and tubular**
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
- RIVETS AND BURS, iron, copper and brass**
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
- ROCK DRILLS**
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
- ROLLING STEEL DOORS**
*A. B. Ormsby Co., Ltd., Toronto.
- ROOFING, metal**
*A. B. Ormsby Co., Ltd., Toronto.
- ROOFINGS, plastic, liquid, rubber**
Beveridge Supply Co., Ltd., Montreal, Que.
- ROOFING, ready to lay**
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.
- ROOF TRUSSES**
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.
- ROPE**
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.
- ROPE, cotton**
Hamilton Cotton Co., Hamilton, Ont.
- RUBBER FOOTWEAR**
*Gutta Percha & Rubber Ltd., Toronto, Ont.
The Miner Rubber Co., Ltd., Grandy, Que.
Ames—Holden—McCready, Limited, Montreal, Que.
- RUBBER GOODS**
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Limited, Toronto.
Ames—Holden—McCready, Limited, Montreal, Que.
- RUBBER MACHINERY**
*The Hydraulic Machinery Co., Limited, Montreal.
- RUBBER MILL MACHINERY**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- RUBBER PACKING**
*Garlock Packing Co., Hamilton, Ont.
- RULES**
The Lufkin Rule Co. of Canada Ltd., Windsor, Ont.
- SADDLERY HARDWARE**
*Dominion Forge & Stamping Co., Walkerville, Ont.
- SAFES**
*Goldie & McCulloch Co., Ltd., Galt, Ont.
- SALT**
*Canadian Salt Co., Ltd., Windsor, Ont.
Dominion Salt Co., Ltd., Sarnia, Ont.
- SAMPLE CASES**
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.
- SAND (For all purposes)**
Carroll Brothers, Sherston, Ont.
J. Eveleigh & Co., Ltd., Montreal, Que.
- SAND RAMMERS**
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
- SANITARY PAPER TOWELS**
*E. B. Eddy Co., Ltd., Hull, Que.
- SASH CORD, cotton**
Hamilton Cotton Co., Hamilton, Ont.
- SAVE-ALLS**
*The Hydraulic Machinery Co., Limited, Montreal.
- SAW SHARPENING MACHINERY**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- SAWS**
*E. C. Atkins & Co., Ltd., Hamilton, Ont.
Henry Disston & Sons, Ltd., Toronto, Ont.
Shurly & Deitrich, Galt, Ont.
- SAWS, cross-cut and band**
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.
- SAWS, circular mill**
Shurly & Deitrich, Galt, Ont.
- SAWS, of all kinds**
Simonds Canada Saw Co., Ltd., Montreal, Que.
- SAWS, rip**
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.
- SAWMILLS**
*The Watrous Engine Works Co., Ltd., Brantford, Ont.
- SCALES**
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
- SCREENS**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
- SCREEN DOORS AND WINDOWS**
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.
- SCREENS; Folding Draft**
The Stratford Mfg. Co., Limited, Stratford, Ont.
- SCREWS**
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*National Acme Company, Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Torrington Company, Limited, Upper Bedford, Que.
- SCREW PLATES**
*Butterfield & Co., Rock Island, P.Q.
- SEATS; Park and Grand Stand**
The Stratford Mfg. Co., Limited, Stratford, Ont.
- SECURITIES, engraved**
American Bank Note Co., Ottawa, Ont.
- SERGES**
Rosamond Woollen Co., Almonte, Ont.
- SEWAGE DISPOSAL SYSTEMS**
Anthes Foundry, Ltd., Toronto.
- SEWAGE SCREENS**
*The Hydraulic Machinery Co., Limited, Montreal.
- SHAFTING**
*Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
- SHANTY BLANKETS**
Slingsby Mfg. Co., Ltd., Brantford, Ont.
- SHAPERS**
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
- SHEAR BLADES, iron**
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.
- SHEATHING**
*The Barrett Co., Ltd., Toronto and Montreal.
- SHEATHING, asbestos corrugated**
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
- SHEET METAL STAMPINGS**
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
- SHEETS, fibre**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- SHEETS, galvanized**
*Dominion Sheet Metal Co., Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
- SHINGLES**
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
- SHINGLE SAWS**
*E. C. Atkins & Co., Inc., Hazelton, Ont.
- SHINGLE STAINS**
Sturgeons, Limited, Toronto.
- SHIP BUILDERS**
J. & R. Weir, Montreal, Que.
- SHIRTS**
John W. Peck & Co., Ltd., Montreal, Que.
- SHIRTS, workmen's**
*A. R. Clarke & Co., Ltd., Toronto.
- SHOE PEGWOOD**
O. Chalifour, Quebec, Que.
- SHOE LININGS**
Galt Knitting Co., Ltd., Galt, Ont.
- SHOOKS**
Barchard & Co., Ltd., Toronto.
- SIGNAL CELLS-RAILWAY**
*Canadian National Carbon Co., Ltd., Toronto.
- SILENT CHAIN DRIVES**
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
- SILVER BULLION**
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
- SILVERSMITH**
Standard Silver Co., Toronto, Ont.
- SILVERWARE, sterling**
Roden Bros., Ltd., Toronto, Ont.
- SINKS, enamelled**
Amherst Foundry Co., Ltd., Amherst, N.S.
- SKIFFS**
Peterboro Canoe Co., Ltd., Peterboro, Ont.
- SKYLIGHTS**
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.
- SLOTTERS**
*Canada Machinery Corporation, Ltd., Galt, Ont.
- SMOKE CONSUMERS**
*Under-Feed Stoker Company of Canada, Limited, Toronto.
- SMOKE-STACKS**
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, Limited, London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
- SOAPS**
J. Barsalou & Co., Ltd., Montreal.
- SOAP (soft, oil)**
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
- SODA ASH**
Brunner, Mond Canada, Limited, Amherstburg, Ont.
- SODA WATER FOUNTAINS**
J. J. McLaughlin, Ltd., Toronto.
- SODA WATER FOUNTAINS AND ACCESSORIES**
Fletcher Mfg. Co., Ltd., Toronto
- SOIL PIPE**
Anthes Foundry, Ltd., Toronto.
- SOLDER**
Alonso W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.
- SOLDER, silver**
Geo. H. Lees & Co., Hamilton, Ont.
- SOLDER, wire and bar**
American Can Co., Montreal, and Hamilton.
- SNOWSHOES**
Holt, Renfrew, Ltd., Quebec, Que.
- SPECIAL MACHINERY**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- SPECIALTIES, SWAGED AND THREADED WIRE**
*Torrington Company, Limited, Upper Bedford, Que.
- SPELTER**
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.
- SPIRAL CONVEYORS**
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto, Ont.
- SPLIT PEAS**
H. Murton, Ltd., Guelph, Ont.
- SPOOLS**
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
- SPORTING MEDALS AND TROPHIES**
Roden Bros., Ltd., Toronto, Ont.
- SPRAYERS**
Sramotor Co., London, Ont.
- SPRING COTTERS**
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
- SPRINGS**
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
- SPRINGS, carriage and automobile**
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
- SPRING SHACKLE BOLTS**
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

SPRINKLER SYSTEMS

- *Chicago Bridge & Iron Works, Bridgeburg, Ont.
- *The Bennett & Wright Co., Ltd., Toronto, Ont.
- *Purdy, Mansell, Ltd., Toronto.

SPOCKET WHEELS

- *Canadian Link-Belt Company, Ltd., Toronto, Ont.

STAINS, creosote shingle

- A. Muirhead Co., Ltd., Toronto.

STAMPS, steel, brass and rubber

- Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMPINGS, steel, brass, aluminum, etc.

- Larsen & Shaw, Ltd., Walkerton.

STATIONERY, office

- Harris Lithographing Co., Toronto.

STEAM PIPE AND BOILER COVERINGS, asbestos

- *Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS

- *Canadian Mead Morrison Co., Ltd., Montreal, Que.

STEAM SPECIALTIES

- *C. A. Dunham Co., Ltd., Toronto.

STEAM TRAPS

- *C. A. Dunham Co., Ltd., Toronto.

STEEL

- *Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

- *Burlington Steel Co., Ltd., Hamilton, Ont.

- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.

STEEL BILLETS AND BLOOMS

- *The Steel Co. of Canada, Ltd., Hamilton, Ont.

STEEL BUILDINGS

- *The Canadian Bridge Co., Ltd., Walkerville, Ont.

- *Dominion Bridge Co., Ltd., Montreal, Que.

- *Hamilton Bridge Works Co., Ltd., Hamilton, Ont.

- *Maritime Bridge Co., Ltd., New Glasgow, N.S.

- *McGregor & McIntyre, Ltd., Toronto, Ont.

- *MacKinnon Steel Co., Limited, Sherbrooke, P.Q.

- *The Pedlar People, Ltd., Oshawa, Ont.

- *The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL CASTINGS

- Beauchemin & Fils, Ltd., Sorel, Que.

- *Canadian Steel Foundries, Ltd., Montreal, Que.

- *Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.

- *Electric Steel & Metals Co., Ltd., Welland, Ont.

STEEL DOORS, rolling

- *The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL FILING EQUIPMENT

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

STEEL LATH

- *Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL PLATE WORK

- *Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.

- *Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.

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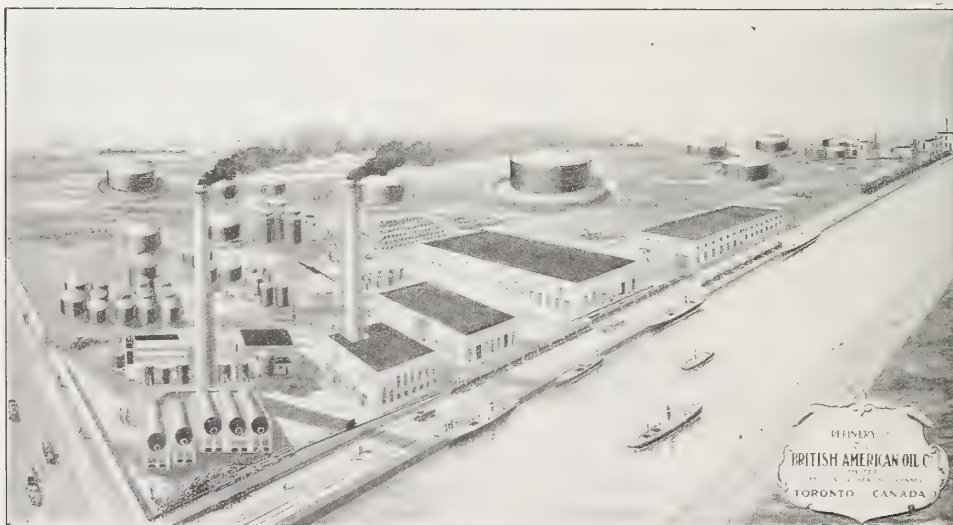
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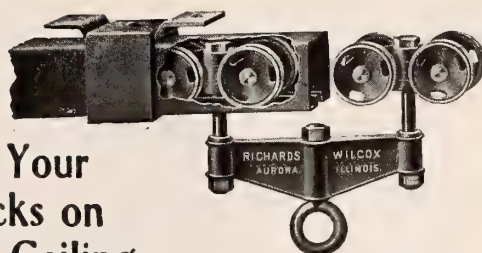
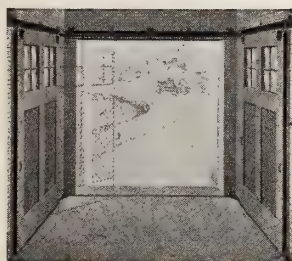


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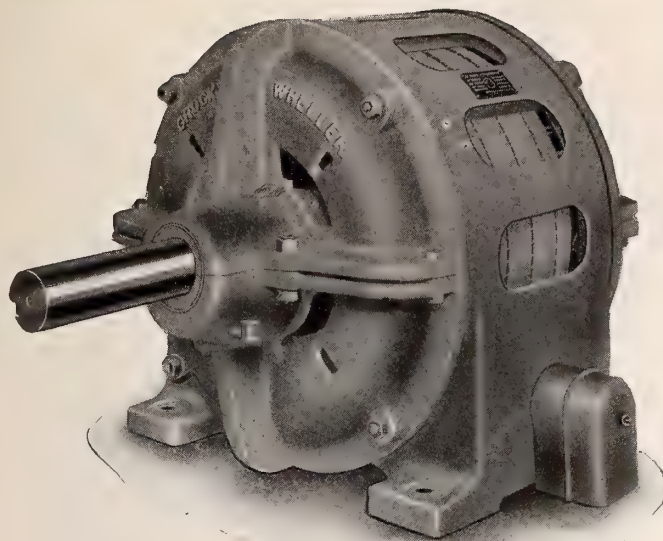
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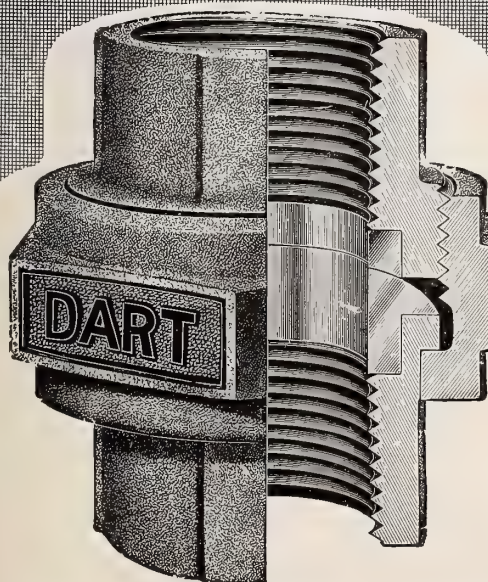
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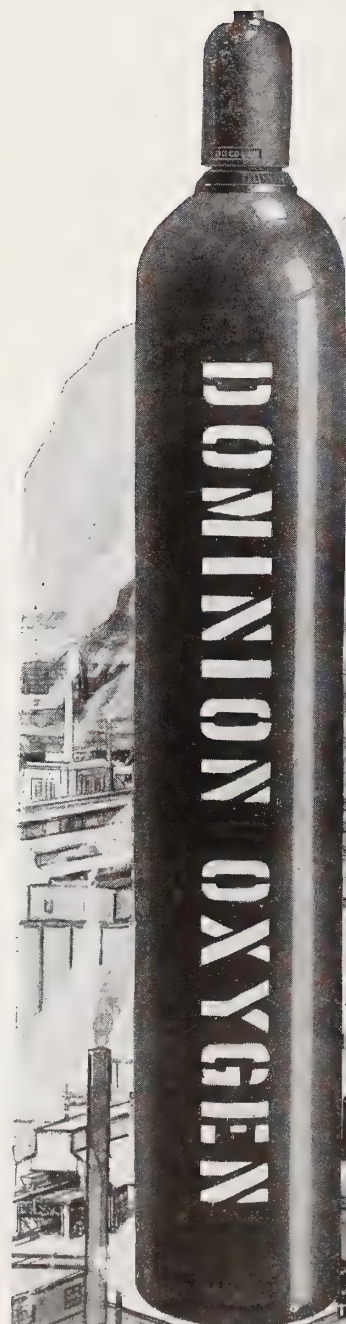
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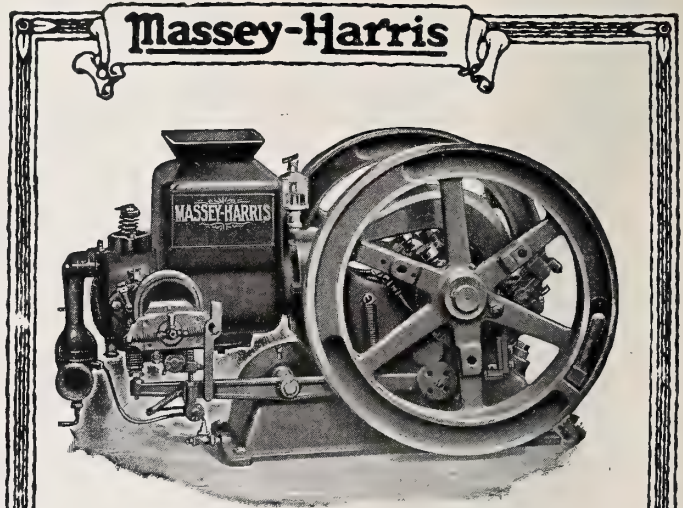
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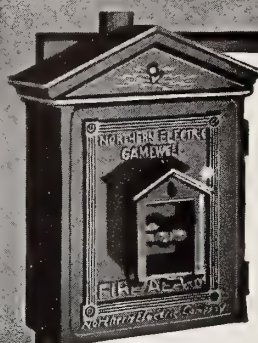
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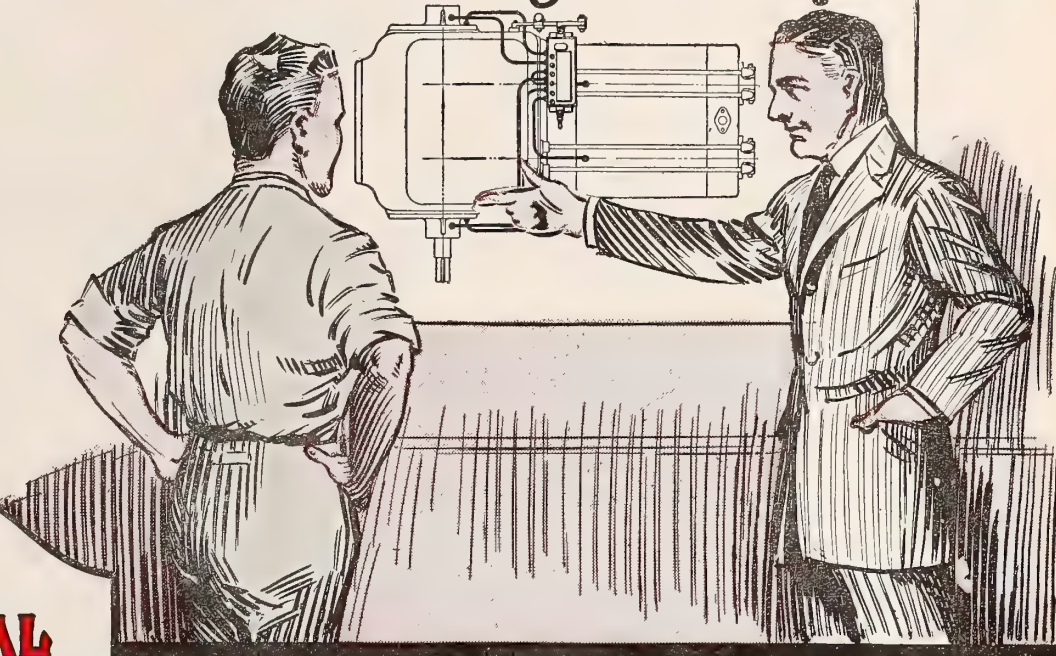
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FLASHLIGHT

The light that says "There it is"

AC-31-M

Canadian "Armor Plate" PUNCHES AND SHEARS

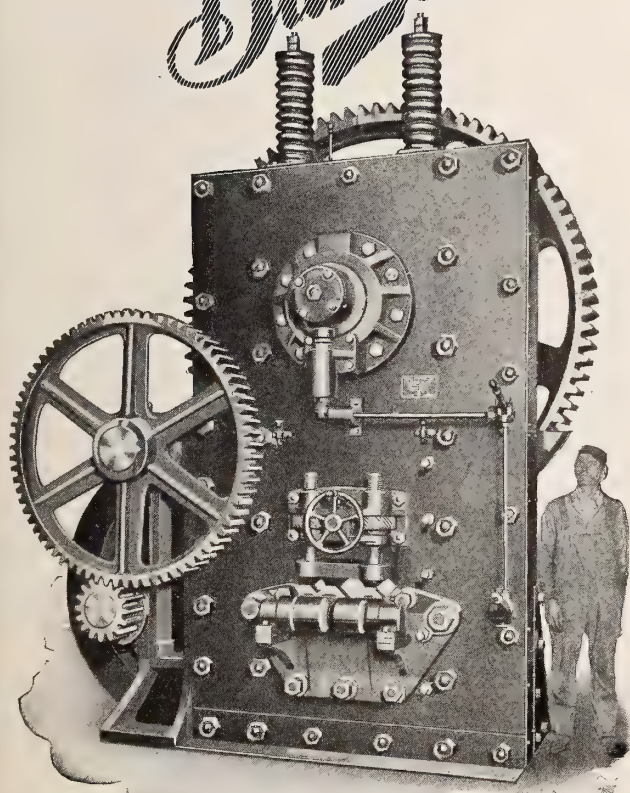
THESE machines have frames made of tough, unbreakable, rolled steel plates—bolted and doweled together to form one solid integral whole that will withstand continuous maximum capacity service.

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New model National Cash Registers help merchants meet new conditions

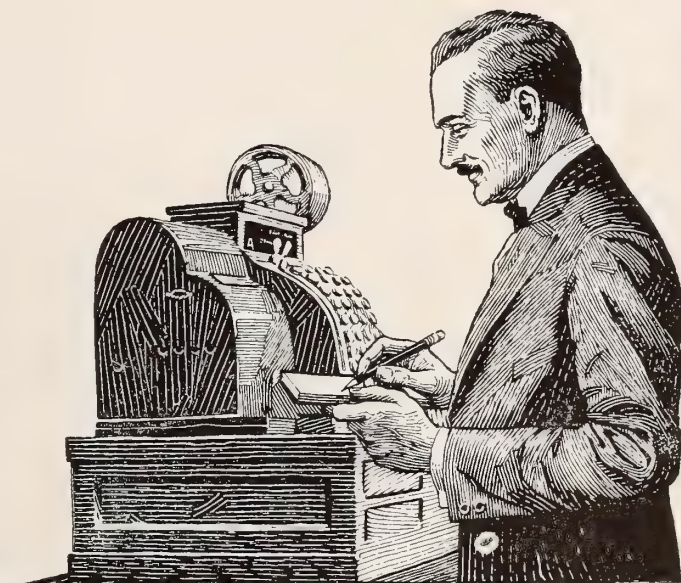
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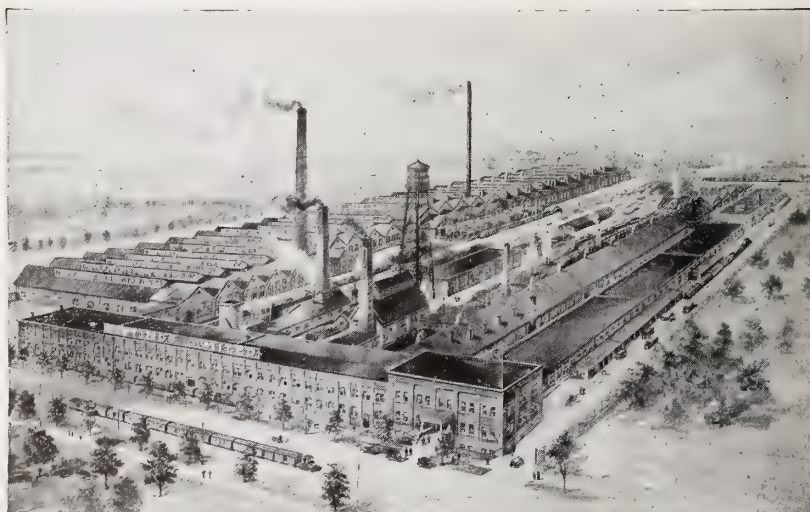
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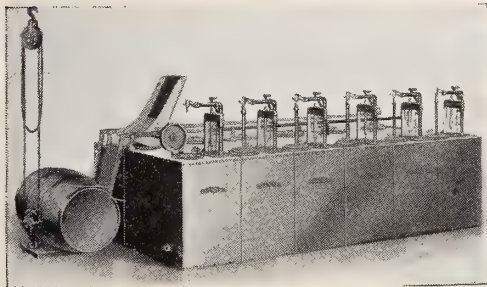
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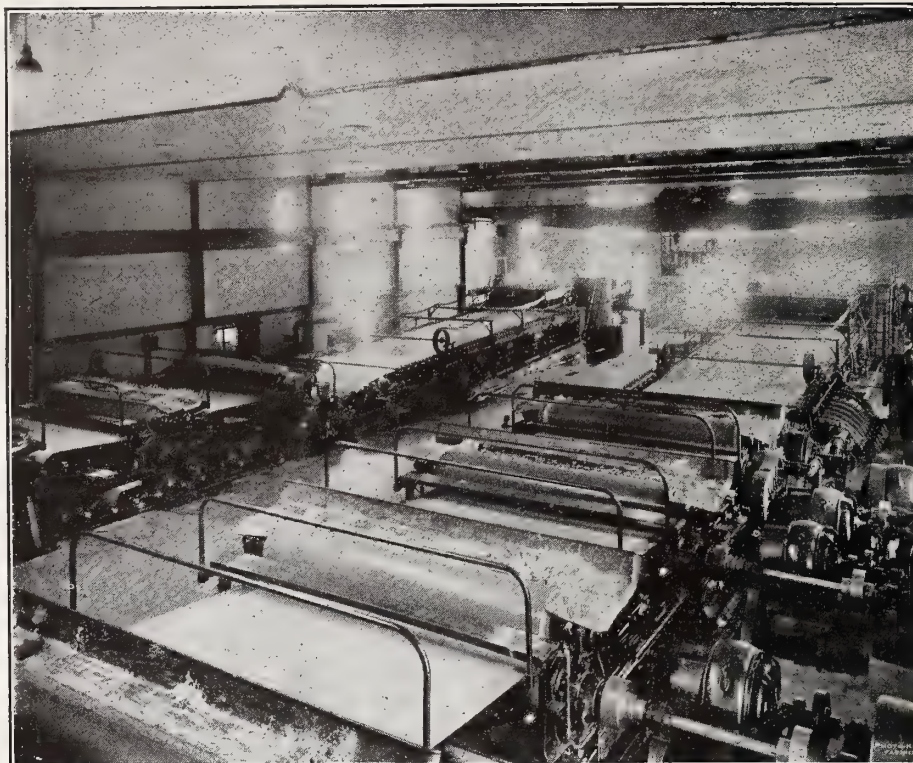
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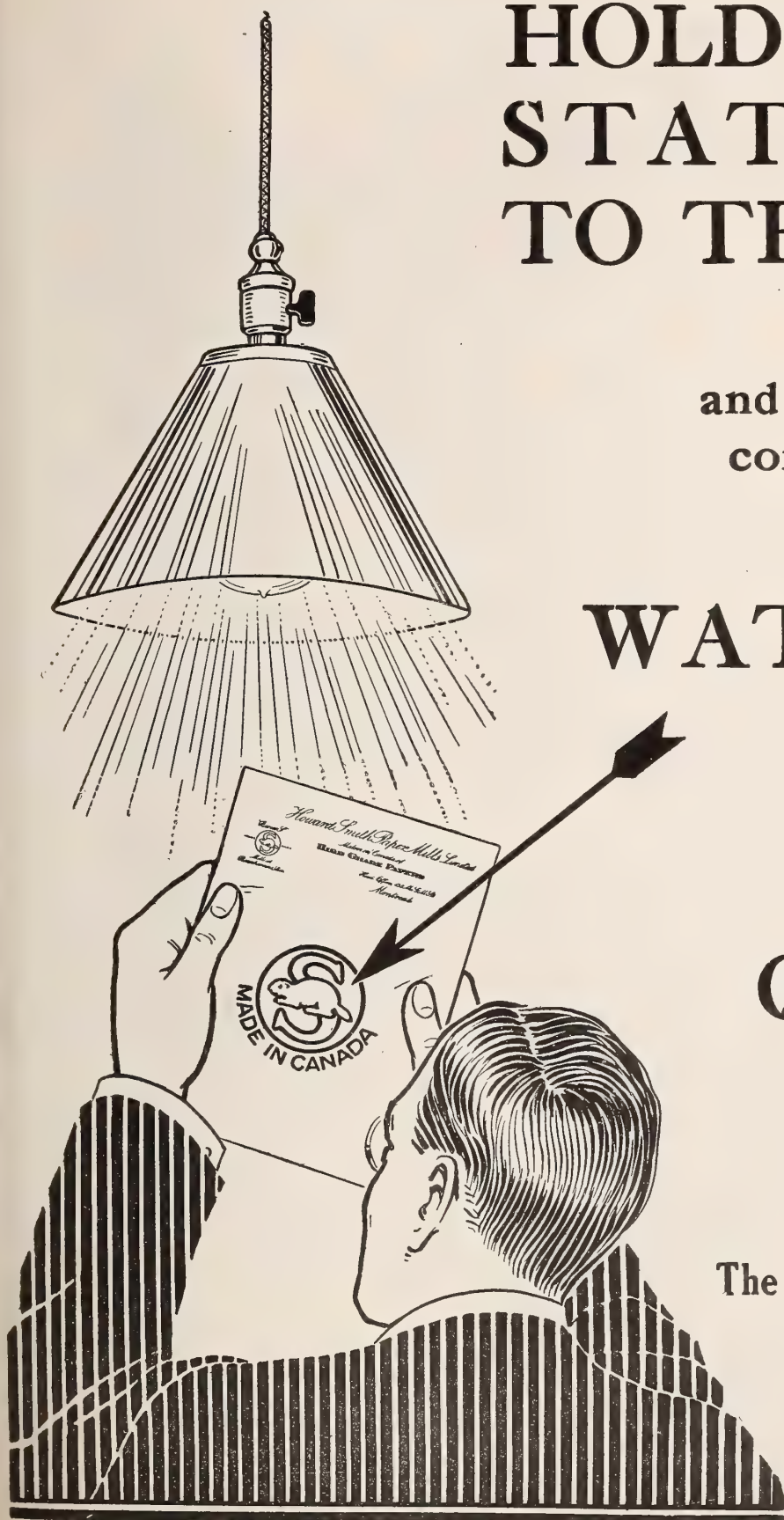
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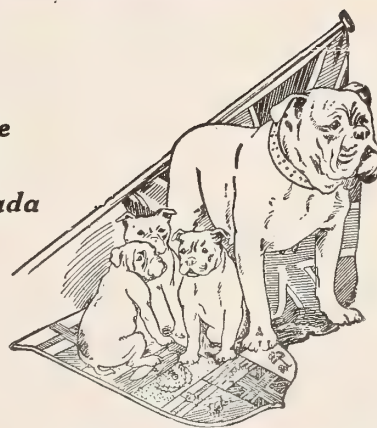
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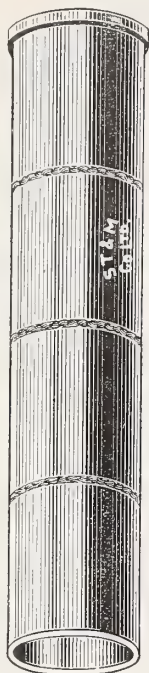
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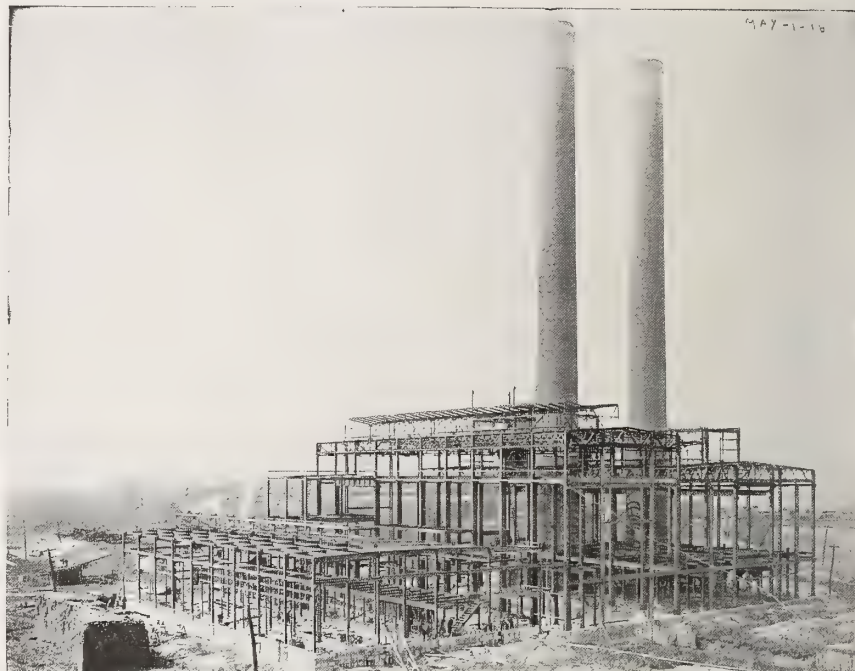
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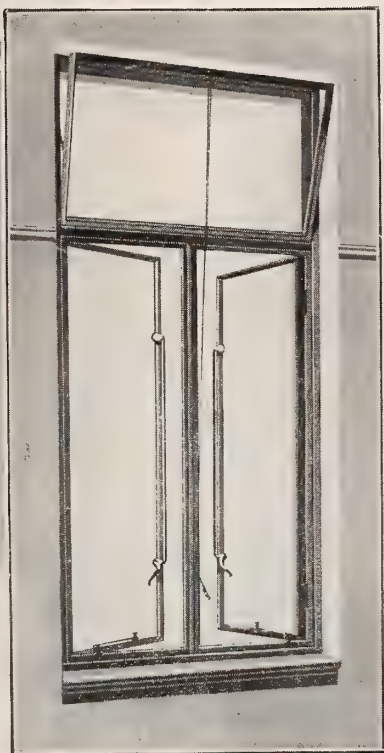
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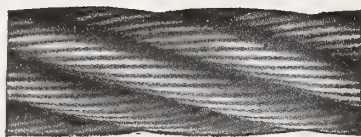
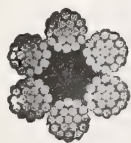
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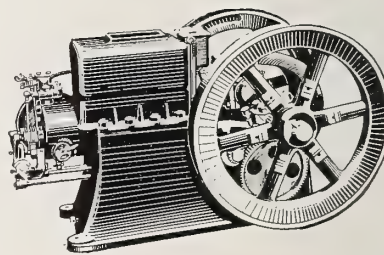
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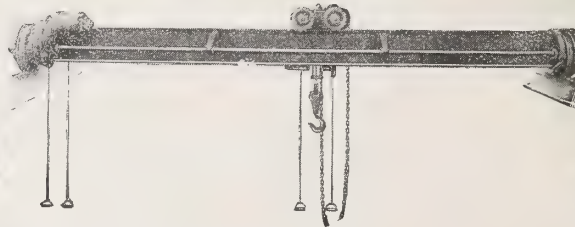
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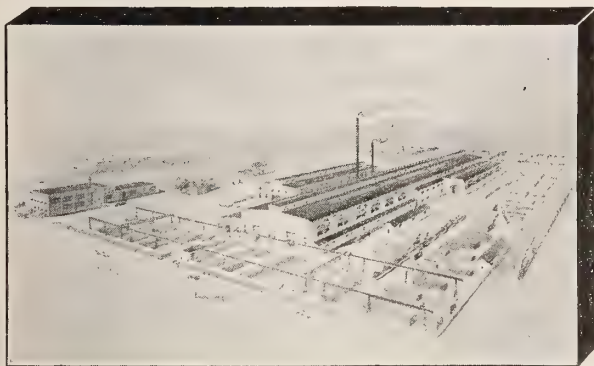
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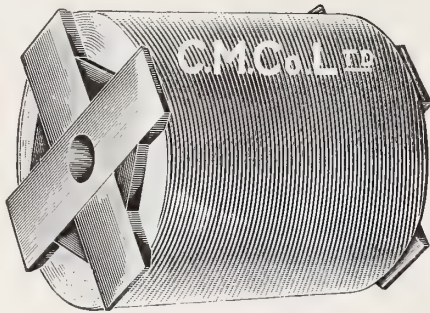


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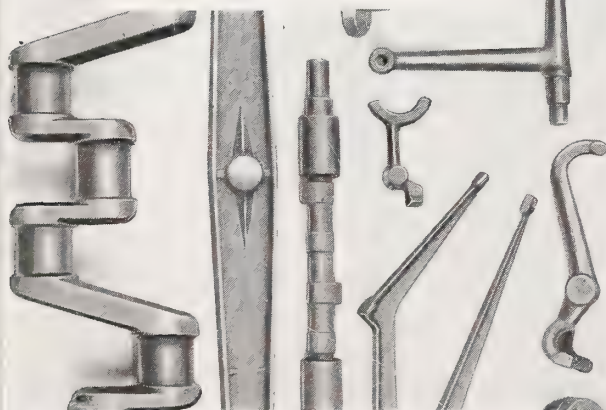
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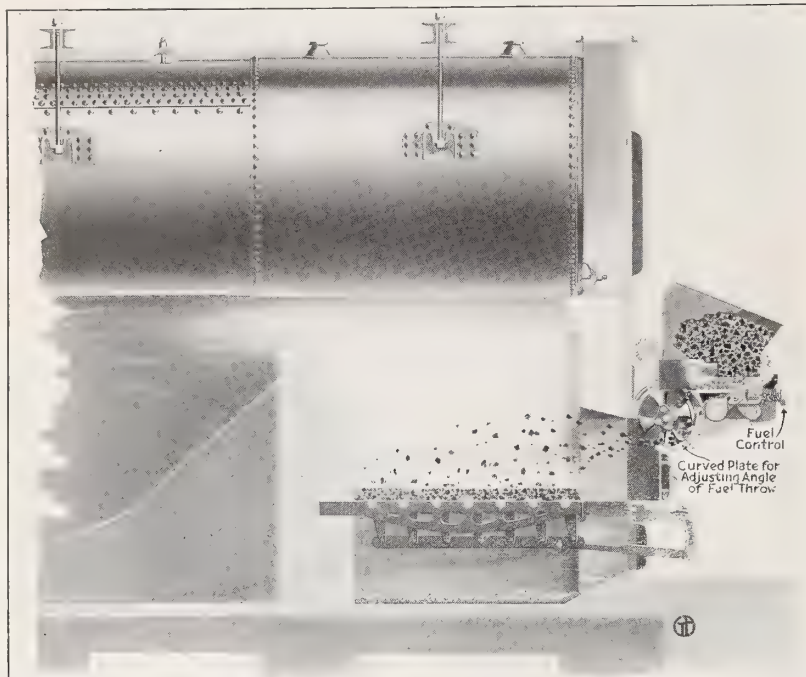
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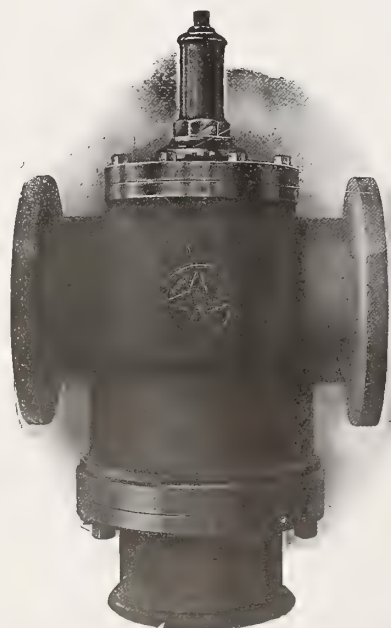
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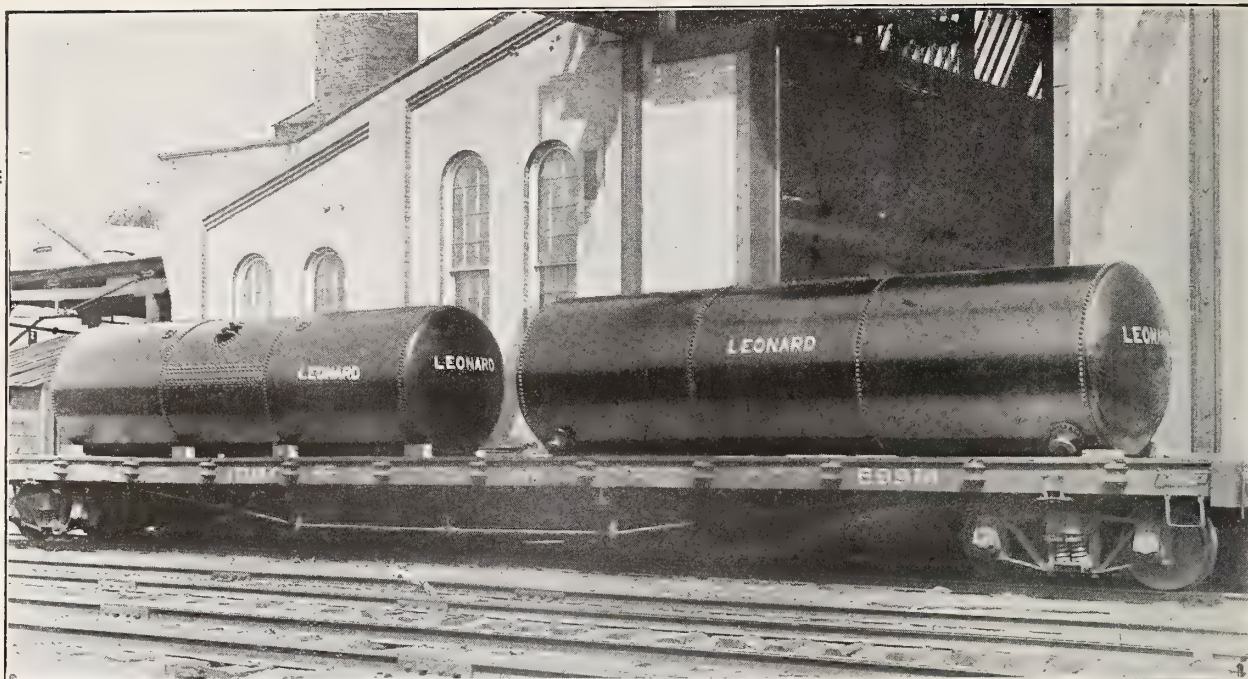
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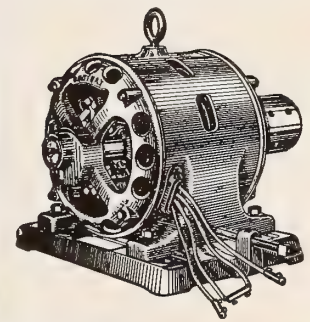


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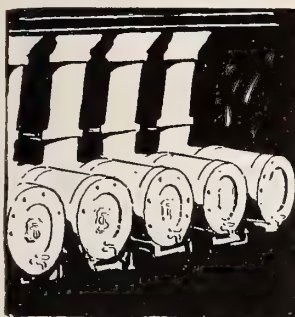
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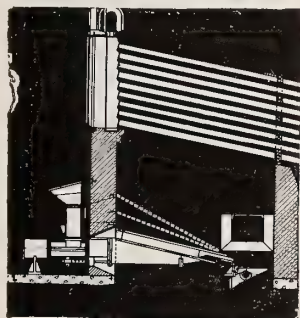
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The simple balanced dump plate easily operated by one man.

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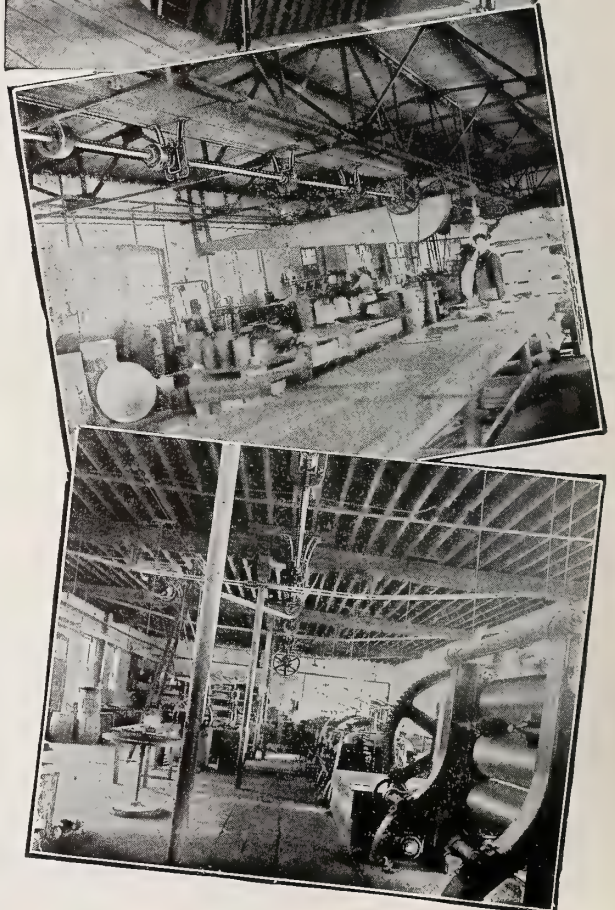
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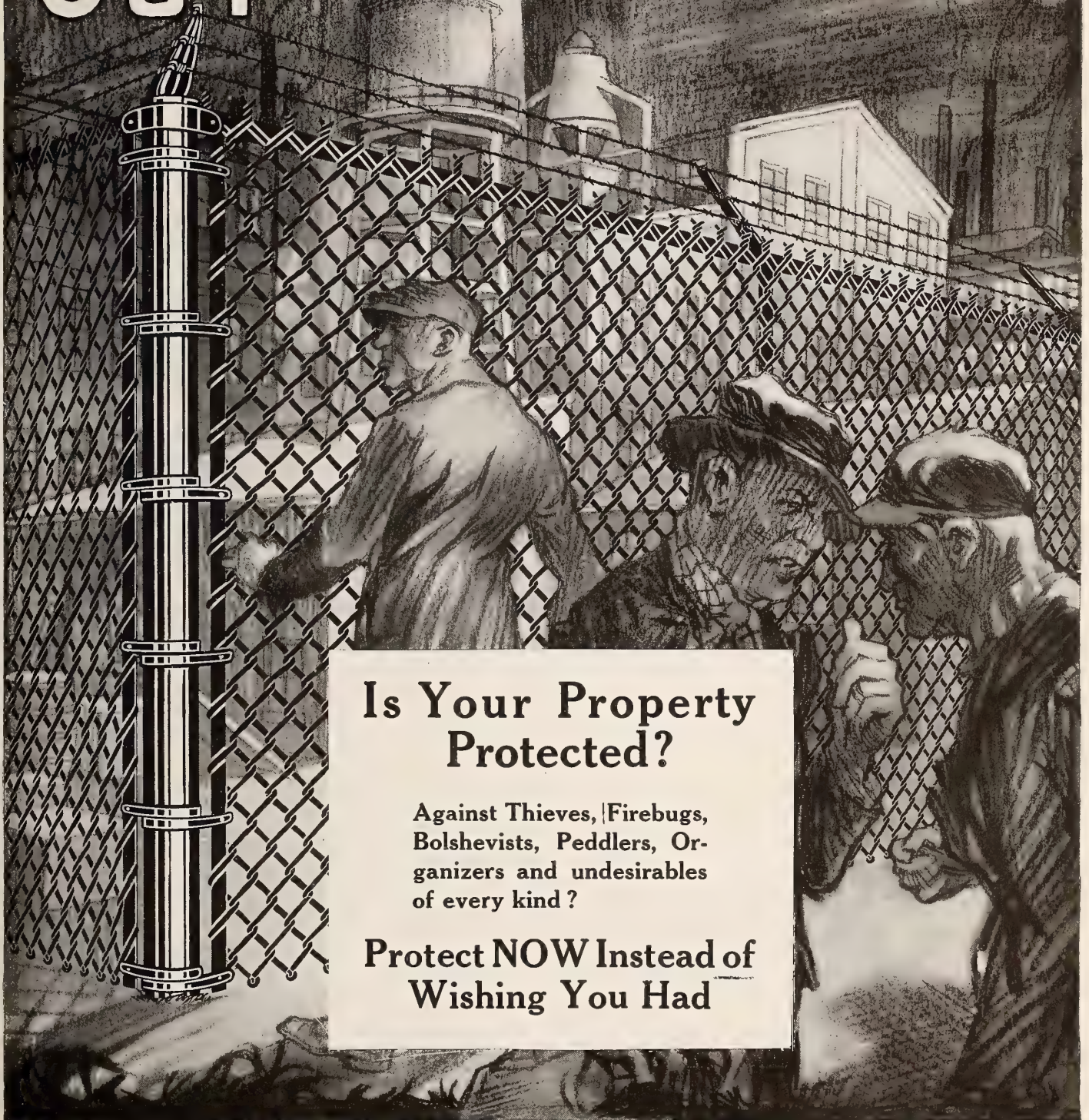
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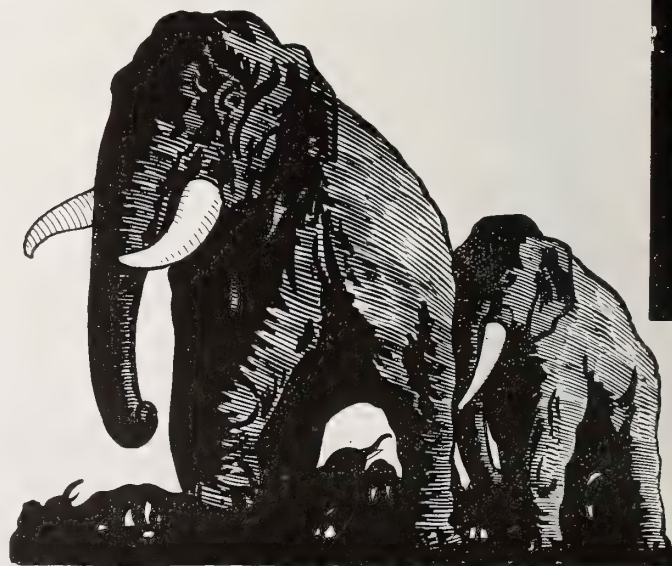
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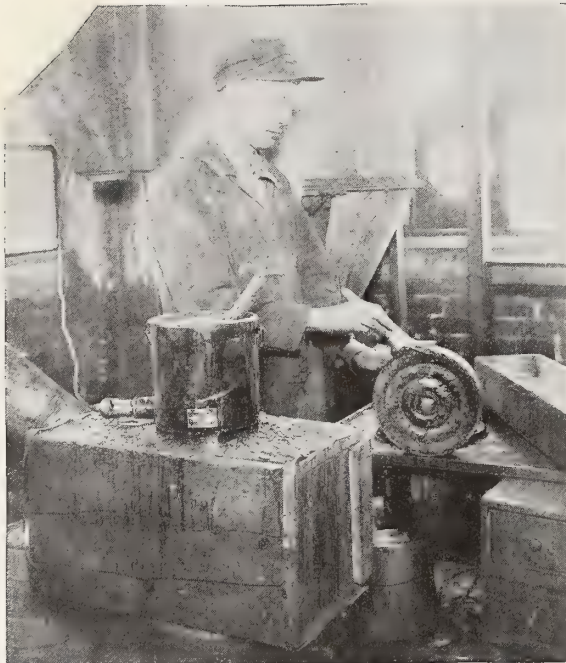


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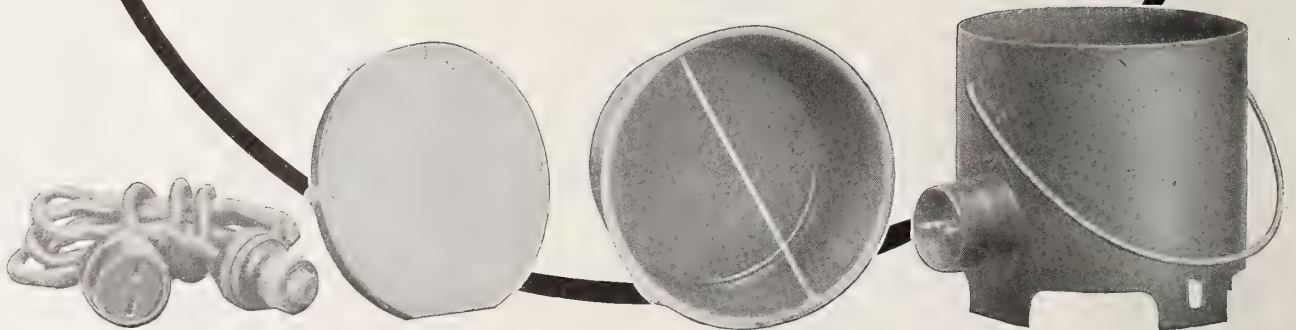
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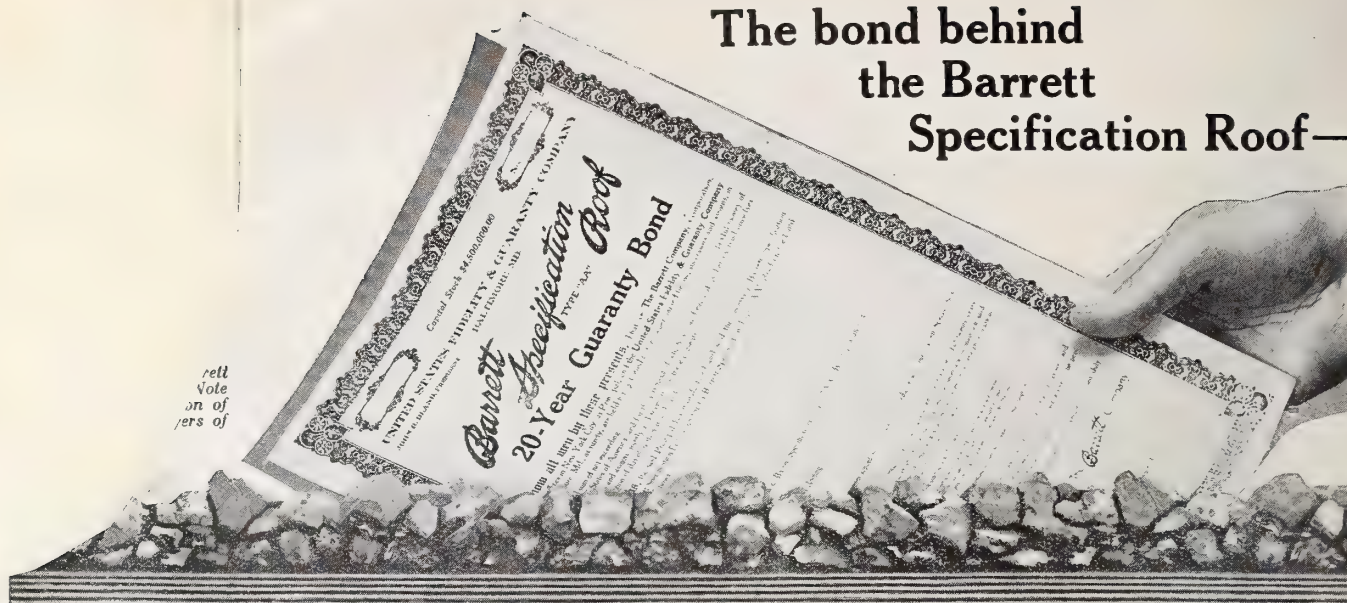
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The Canadian Manufacturers Association

INCORPORATED

Vol. XXIII.

TORONTO, NOVEMBER 1921

No. 7

Editorial Comment

Mr. Fraser's Work in the West.

THE chairman of the Prairie Division, Mr. W. G. Fraser of Winnipeg, has set a good precedent in paying an official visit to the members in the principal industrial centres of the three prairie provinces. Only those who have spent days and nights travelling across Western Canada can fully appreciate what this means in sacrifice of time and energy. It is no light undertaking for a busy manufacturer like Mr. Fraser to leave his office for the length of time necessary to make the swing round by Regina, Medicine Hat and Calgary and back by Edmonton and Saskatoon, all in the interests of and for the welfare of the Association, and the membership at large may indeed feel grateful for the service he has rendered.

Advantage was taken by Mr. Fraser during his tour to deal with the tariff question. He interpreted fairly and squarely the position of Canadian manufacturers on the subject and advanced the arguments necessary to demonstrate why Canadian manufacturing industry requires protection. This was good missionary work in a part of the country where considerable misunderstanding seemingly exists and it is to be hoped that Mr. Fraser's effort to make plain the necessity for protection will have good results.

In order that members in general may have the benefit of Mr. Fraser's arguments, his address is reproduced in full in this number of INDUSTRIAL CANADA

The Fur Farming Industry.

SUBSTANTIAL progress is being made by the fur farming industry in Canada according to figures compiled by the Dominion Bureau of Statistics. For 1920, the number of fur farms in the Dominion was 587, of which 578 were fox farms, 6 mink, 2 raccoon and one karakule sheep. The animals on these farms were valued at \$4,722,905, the greater part of the value being made up of 13,694 silver foxes worth \$4,536,417. The value of the animals sold totalled \$763,221 and pelts sold in addi-

tion brought in \$388,335. The selling value of live silver foxes ranged from \$100 to \$1100 and pelts from \$75 to \$750.

The industry is creeping westward. Prince Edward Island, where the industry began, is still in the lead with 309 farms, on which the animals are valued at more than three million dollars. But the industry is now all over Canada, the number of fur farms by Provinces being:—Nova Scotia, 55; New Brunswick, 57; Quebec, 80; Ontario, 42; Manitoba and Saskatchewan, 4; Alberta, 15; British Columbia, 11; Yukon Territory, 14.

Most of these farms are fox fur farms, but 218 mink were born in Nova Scotia, Ontario and Quebec farms, 13 raccoons on Ontario and Quebec farms, 31 skunks on Ontario farms and 400 karakule lambs in Alberta.

Index Numbers Still Declining.

INDEX numbers of wholesale prices, as compiled by the Department of Labour, Ottawa; Professor Michell of McMaster University, Toronto and the Statistical Department of the Canadian Bank of Commerce, continue to record declines, though the change from month to month is now becoming very small. In fact, were it not for the lower prices of many food-stuffs, the movement would again be upward.

It is significant that of the 24 commodities listed by the Bank of Commerce as being mainly articles of imports, the average price advanced in October. This was represented by a movement in the index number from 147.92 to 148.81. We paid more for cotton, rubber, coal and coke. On the other hand, owing to considerable declines in the price of wheat, flour, potatoes, cattle and hogs, the index number of 24 articles of export fell from 159.26 in September to 150.06 in October. The combined number for both exports and imports dropped from 153.59 to 149.48

Professor Michell, in announcing that his index number for October showed a decline of 1.7 per cent. from September, states that the continued weakness in all farm products, which extends to meats as well as grains, would seem to make it fairly certain that the decline in the general index for all products in Canada will continue for

some time. This decline, he finds, is not altogether unhealthy, since it is really now the process of adjustment of the various items to a general level.

It is to be noted, he adds, that the fall in wholesale prices in the United States has been heavier than in Canada and it is to be expected that for some time Canadian prices will continue to decline more rapidly than those in the United States until the level between the two is more even.

Canada's Coal Supply.

SOME interesting statistics having to do with Canada's coal supply are published in the Monthly Bulletin of the Canadian Bank of Commerce for November. The rather startling information is given that for the twelve months ending August, the value of anthracite and bituminous coal imported into Canada was \$108,684,165, constituting $11\frac{1}{4}$ per cent of the value of all imports for that period. Compared with the preceeding twelve months, this is a heavy increase, the earlier figure being \$73,263,859 or less than 6 per cent. of the value of all imports.

During the first half of 1921, the total output of coal in Canada was 6,783,060 tons. This was only 85 per cent. of the 1920 output, though slightly larger than the output for 1919. There was imported during the six months, 8,319,246 tons or 22 per cent. more than the previous year. Combining output and imports, the gross supply amounted to 15,102,306 tons, which was slightly over the 1920 figures. Export accounted for 869,004 tons, leaving for domestic consumption, 14,233,302 tons, being approximately 800,000 tons more than in 1920.

It is noted by the Bulletin, however, that imports are now dropping. Thus for the first five months of the fiscal year, April-August, imports totalled 7,195,184 tons, valued at \$35,787,066. For the corresponding months of 1920, imports amounted to 7,459,942, valued at \$38,401,001. At present shipments of United States coal to ports at the western extremity of the Upper Lakes are greater in volume than a year ago, while the movement from the Alberta mines to consumers on the prairies is considerably less.

Death of Senator Nicholls.

IN the passing away last month of Hon. Frederic Nicholls chairman of the board of the Canadian General Electric Company and director of several other financial and industrial corporations, Canada has lost a distinguished leader in the field of industry.

The Canadian Manufacturers' Association may take special interest in the career of the late Senator, because of the fact that he served in the early days as its secretary, a circumstance which no doubt contributed in some degree at least to the success of his future undertakings.

He retained at all times, as might well be expected, a concern for the welfare of the organization and, while never taking that close personal share in its work which would undoubtedly have carried him to the presidential

chair, yet he was not found wanting when advice or assistance was required.

It was in the field of electrical development that Senator Nicholls made his most outstanding success and, when the history of electricity in Canada is written, it will be found that his name stands in the forefront of those pioneers to whom the Dominion owes so much. He had the vision which foresaw and the enterprise which carried out the wonderful development that has been achieved through the harnessing of our great water powers.

As a member of the Senate, Mr. Nicholls took a constructive part in the work of government. His speeches in the Upper Chamber were invariably informative and businesslike. He brought to bear on the problems of the day, an intellect trained in business administration and made a real contribution to the subjects under debate. In all departments of activity in which he was engaged, his passing will mean a genuine loss.

The Association's Tariff Handbook.

AS a contribution to the nation-wide debate on the tariff now in progress, the Association's recent publication,—“The Tariff, Why Canada needs it,”—will be found of value. It is a book of some ninety-six pages, containing nearly sixty short, pithy articles, each of which develops a special argument on the question of protection. To anyone who is at a loss to meet the claims of the anti-protectionists, this small book offers a good supply of useful ammunition. We trust that members of the Association will take special note of this publication and familiarize themselves with its contents. It is quite non-political in character.

Results From Well Organized Publicity.

OTHER Canadian cities might well take a leaf from Vancouver's book on how to conduct a successful civic publicity campaign. Mr. J. R. Davison, manager of the Vancouver Publicity Bureau, has issued his report for the year ending July 31, 1921. It takes the form of a sixteen-page booklet, in which, in addition to the letter-press, are to be found reproductions of some of the advertisements and articles that have been prepared and sent out by the Bureau during the year. The advertising appeared principally in tourist and motoring publications of the Western States, in prairie newspapers and in Eastern Canadian periodicals, INDUSTRIAL CANADA among the number. The articles were of very widespread distribution and of an instructive character.

While Vancouver's aim is to get as large an influx of tourists as possible, from the prairies and the East in the winter and from the south in the summer, the possibilities arising therefrom in the way of industrial development, an increased permanent population and all the benefits flowing therefrom are not being overlooked. Scenic attractions and a fine climate may be the drawing cards. Once the visitors come, opportunities for business are

presented and in this way the publicity campaign bears fruit.

"Vancouver has carried on a campaign in a different way from any other community," writes Mr. Davison, "and we believe that with possibly one or two exceptions, it is the best campaign on this continent. It is certain that it has brought into Vancouver millions of dollars, which has made business better in every part of the community. It seems to us it would be good business for more of the Canadian cities to 'cash in' in a similar way, on their many and varied attractions."

The New United States Tariff.

THE Fordney Emergency Tariff Act is being extended by the United States Congress. This Act was originally passed on the 27th May, 1921, for a period of six months, and imposed almost prohibitive duties on practically all farm products imported into the United States from other countries. It was passed as a temporary measure, to give protection to the farmers of the United States particularly, until the new permanent tariff of the United States could be brought into force. This new permanent bill has been drafted, has been passed by the House of Representatives and is now before the Senate of the United States. If passed in the present form, it will be one of the most highly protective tariffs ever adopted by the United States. The United States is thus definitely committed to a policy of increased protection. Evidently the United States believes that the best interests of that country lie in protecting its home market, and all its industries, including agriculture.

One result of this policy is that Canadian goods will be largely shut out of United States markets. However, under any circumstances, Canada would have a limited market in the United States, because the United States is making and growing the same articles for export that are made and grown in Canada, and is, therefore, the competitor of Canada, both in our home market and in the markets of other countries.

The sound policy for Canada is to maintain a protective tariff in order to retain and develop her own home markets for her own people and to seek markets for Canadian products in other countries which produce dissimilar articles, especially the countries of the British Empire.

The Lumber Industry of British Columbia.

JUDGED on the basis of stumpage and royalties, the lumber industry of British Columbia does not appear to have fallen off very much this year. In a return for the eight months ended September, Hon. T. D. Pattullo, provincial minister of lands, reports that stumpage on timber sales paid to the province amounted to \$192,700, which compares with \$163,800 in 1920. Royalties were \$495,600, against \$478,600. The reasons for the increase in royalties is given as better collections.

Scaling returns, on the other hand, are about 7½ per cent. less than last year and license fees are not as heavy

but the fact that the decrease is so small in the face of general business depression speaks well for the soundness of the industry.

Destination of the lumber exports from British Columbia, which so far this year show a good increase over last year, is given by Hon. Mr. Pattullo, as follows,—

Exports of lumber from B.C. in feet, Australia, 7,370,889; China, 19,895,787; Egypt, 8,566,400; India, 6,516,085; Japan, 24,737,947; New Zealand, 4,942,992; South Africa, 2,571,615; South America, 33,095; South Sea Islands, 252,922; Strait Settlements, 689,070; United Kingdom and Continent, 11,824,958; Atlantic coast, 3,768,263; Hawaiian Islands, 1,009,480; Phillipine Islands, 1,517,087; California, 1,287,449; San Francisco, 1,644,957; San Pedro, 4,995,260. Total Jan 1. to August 31, 1921, 101,604,256.

The six months total from January 1 to June 30, 1921, was 80,660,952 feet, against a six months total from January 1 to June 30, 1920, of 55,346,494 feet. Since the organization of the Associated Timber Exporters, as a result of organization work initiated by Hon. Mr. Pattullo, lumber exports from British Columbia mills to foreign countries have taken a big jump, according to Mr. J. O. Cameron, head of the Cameron Lumber Company, Limited, and president of the B. C. Lumber and Shingle Manufacturers' Association. Mr Cameron gives these figures for foreign shipments, exclusive of United States.

1910, 73,218,000 feet; 1911, 49,964,000 feet; 1912, 51,512,000 feet; 1913, 47,381,000 feet; 1914, 33,191,000

FREE TRADE



A Consummation devoutly NOT to be Wished

—Cartoon by Racey in the Montreal Star

feet: 1915, 56,701,000 feet: 1916, 45,676,000 feet; 1917, 44,011,000 feet; 1918, 93,000,000 feet; 1919, 10,000,000 feet; 1920, 146,624,000 feet; 1921, (first six months), 80,661,000 feet. The total sales to September 1, 1921, were 218,556,000 feet, and the total shipments to same date, 208,772,000 feet.

A Reasonable Stand on the Tariff.

WHAT seems to be a reasonable stand on the tariff question is taken by C. W. Peterson, the directing editor of *Farm and Ranch Review*, an agricultural paper published twice a month in Calgary, Alta.

In a lengthy article entitled "The Truth About the Tariff", appearing in a recent issue, Mr. Peterson makes the point that the question at issue is not whether we want a protective tariff or not, but whether we want industries in Canada or not.

"All the evidence so far seems to show that we cannot have industries without a tariff", declares Mr. Peterson. "If so, the real points are: What are the minimum tariff requirements in each case? How can we prevent abuse and can we successfully regulate the domestic price?"

The writer frankly admits that he is not a worshipper of the industrial state, but he adds,—“those who believe that national development is impossible without industrial development, base their argument on what is undoubtedly a fact, namely, that Canada cannot hold her population unless she can offer a variety of occupations to her citizens. Otherwise, they would emigrate; which they are doing even now in alarming proportions. And we must have population to pay our huge national debt.”

Mr. Peterson, granting the necessity for protection in order to enable Canada to create an industrial state, advocates the appointment of just such a commission of investigating experts as the Canadian Manufacturers' Association has endorsed repeatedly at annual meetings.

"Such a body," he says, "would report to the Finance Minister, but its findings would be tabled in Parliament and be available to all. If the Minister, in any particular instance, decided to act in opposition to the advice of this body, he would have full opportunity to state his case on the floor of the House. Furthermore, such a commission might also have something to say about the selling price of protected commodities in the home market. No protected industry could reasonably object to that. Protection is presumably afforded for the sole purpose of enabling an industry to 'carry on,' not to create an opportunity to 'profiteer'."

An Opportune Moment.

THE London Times in a recent editorial, in which it referred to the effect of the Fordney Tariff Bill and the discount on the Canadian dollar on public sentiment in Canada, expressed the view that the iron was hot and

the time favourable for a vigorous blow on behalf of British goods. But,—“in these circumstances”, to quote the Times, “it is very unsatisfactory to learn that little or nothing is being done, apart from the efforts of the British Trade Commissioners, to seize the opportunity. Mr. Ben H. Morgan, the chairman of the Council of the British Empire Producers' Organization, who has just returned from Canada, believes that our export trade with the Dominion can be increased by at least £50,000,000 per annum if British manufacturers and exporters will set to work in the right way. They must realize the fact that Canadians are able to telephone many of their orders to American firms and to get delivery of goods in large or small quantities—within a day or two, in many cases. On the other hand, if British goods are desired it is impossible to get them quickly in the desired quantity. To remedy this state of affairs, Mr. Morgan suggests that British firms should send stocks to Canada either to their own distributing stations, to bonded warehouses, or on consignment to reliable firms, and he points out that the extension of the export credits scheme to Canada has removed the difficulty of financing such shipments. In the case of firms contemplating the establishment of branch factories Mr. Morgan thinks that the best procedure in the case of manufacturers who turn out a variety of products would be to open a branch plant for the manufacture of one or two lines best suited to the Canadian market and to use the organization connected with this factory to push the sales of other goods made by the firm in the United Kingdom. In any event the time appears to be opportune for a well-planned mass attack with the object of taking full advantage of the present state of Canadian sentiment in regard to developing inter-Empire trade. Canada has reaped an excellent harvest, and though she, too, has her unemployment problem her business men are full of confidence in her future. If we can obtain a good foothold while present conditions persist there is no reason why we should not retain and enlarge it as the Dominion grows in population and prosperity.”

Foreign Trade of Russia.

THE British Agent at Moscow reports that as the result of a special agreement with the Commissariat for Foreign Trade of the Russian Soviet Government, a company known as the “Russian Export and Import Company”, has recently been formed in Moscow to do business with foreign countries on behalf of the Soviet Government, on a commission basis. The founders of the company were formerly leading merchants in Moscow and were in close business relations with important British and foreign firms. The formation of the company, which is the first step towards removing the foreign trade of Russia from the direct management of the Commissariat for Foreign Trade, is for the purpose of exporting Russian produce abroad and importing foreign goods into Russia.

A Review of Business Conditions in Canada, the United States and Other Countries

ILLUMINATING EXTRACTS FROM VARIOUS SOURCES

JUDGING from reports received recently from a number of manufacturing companies, the improvement in general business conditions which became perceptible during September and October is being continued this month. While on the whole the improvement is not so marked as to create enthusiasm, it is steady and stands on pretty secure foundations. There is now a certain degree of stability which was lacking before and this, coupled with short stocks in the hands of the retailers, is contributing to inspire confidence. Practically all weekly reports such as those of Canadian Credit Men's Trust Association, R. G. Dun & Co., and Bradstreet's confirm the foregoing estimate of the situation.

Survey of Business and Industrial Conditions in Canada

From the November bulletin of the Royal Bank of Canada, the following illuminating comments on the current business situation in Canada are extracted:—

"It is possible to report a slight improvement in general business conditions during the past two months; and although this improvement has not been of a duration or scope to warrant any great optimism, yet it is exceedingly welcome to a business world which has suffered little but reverses since the summer of 1920.

"Unexpectedly low estimates of the output of the current United States cotton crop and a consequent heavy advance in the price of raw cotton, probably has been a factor in the increased activity of the cotton goods trade. The price position of cotton is as yet a far from settled one. The possibility of short supplies supports the opinion of those who predict still higher prices. But the possible reduction of consumption, which these higher prices may entail, is an argument on the other side.

"Whatever the outcome may be in the case of cotton, it is not felt that the return of prices in general to a permanently higher level is probable. The very fact, however, that certain commodities have managed to advance is an encouraging sign after a period of prolonged liquidation. It is a sign that greater stability may be expected."

"In British Columbia, the lumber and salmon fishing industries find business slightly better. Export orders for lumber have been more numerous. Good shipments have been made to Japan. Approximate figures covering the production of canned salmon are now available. British Columbia this year has produced about 420,000 cases, as against nearly 1,200,000 cases last year. This is discouraging. The pack of Sockeye salmon reached a total of only 158,000 cases, which compares with about one million packed in 1913. Prices for this grade of canned salmon have steadily improved. The short pack has also created a new demand for the lower grades, and the prospects for the disposal of stocks on hand are good.

In Ontario, there has been little change in industrial conditions during the last month. Some firms advise an improvement, others continue to note a gradual slowing down. Certain favorable features which our report emphasizes are:

- "1. Greater stability in prices.
- "2. Greater trade activity due to depletion of stocks on hand.

The accompanying material is taken from a number of sources which may be regarded as authoritative. They include the monthly letters or bulletins of banks and the pages of well-known business and financial publications. When thus assembled and compared, it will be found that they supply a very fair idea of existing conditions throughout the world and furnish as accurate a key as possible to the future.

—The Editor.

"3. Increased confidence.

"The lumber market still is very quiet. It is felt that operations will be largely curtailed during the coming winter, but it is not possible to present any general statement as to how the cut will compare with that of a year ago. Buying on the part of retailers is being conducted on a limited basis, and for immediate requirements. Orders are for the better grades, and there is still a wide divergence in prices."

"In the Province of Quebec conditions in the manufacturing industry have undergone little change recently. The boot and shoe trade is fairly quiet, the factories in general working on rush orders. An improvement is looked for shortly, as orders come in from travellers who have only lately been sent out. Some cotton mills are very active. The demand for kraft paper is improving.

"The lumber business in the Maritime Provinces still is quiet. Enquiries from local and United States buyers however, are increasing, and the outlook has somewhat improved.

"The fishing industry too has taken a turn for the better. The year's catch is well up to average, and weather conditions have been favorable for curing. There is a fairly good demand at prices averaging about \$6.25 per quintal, which is considered satisfactory when present costs of production are taken into account, and no difficulty in disposing of present stocks before the beginning of next season's fishing is anticipated.

"Quiet prevails in the manufacturing industry.

"Collections throughout Canada continue slow, and many renewals are being sought. Delay in threshing the crop was an adverse factor in the West, but an improvement is expected as the grain comes to market."

Worst of Process of Deflation Believed to be Over

In their October Review, Greenshields & Co., Montreal, find grounds for estimating a change for the better in the results of the harvest and in the stabilization of commodity prices.

"As to the first, the wheat crop of the Western Provinces is now estimated at 248 to 264 million bushels, giving thirty million bushels over 1920. The gross return will be smaller but the expenses of the crop were less, and this with a higher yield will leave a profit not seriously below that of a year ago.

"In any event, the thirty-million-bushel increase in our principal cereal represents that much additional surplus for sale abroad, and in view of the even balance between the world's production and consumption this year, it is a surplus that will find a ready market.

"The decline in the general level of wholesale prices was carried on into August in Canada but at a much slower rate, and in the United States, Great Britain and France the downward movement appeared to have been definitely checked for the time being in the period from June to August. The lag in Canada is a natural sequel to the relative tardiness of our downward movement, when the world-wide slump set in in the early part of 1920. If deflation is not by any means complete, it is at least plain that with 81% of the war rise in wholesale prices cancelled in the United States, 61% in the United Kingdom, 52% in France and 54% in Canada, the worst is over.

"Stabilization in prices of raw materials at this level will stimulate confidence in future manufacturing and assist liquidation of existing stocks. The slowness of the adjustment in retail prices continues to occasion much impatience not entirely justified by the facts, as the rise never equalled the rise in wholesale prices. Rents, labour and transportation costs are liquidating as usual much more slowly than raw materials."

"Business has not been as large in volume as a year ago and it has certainly been very much less profitable. But the record is not as dismal as is sometimes pictured. The chief disappointment of the year lies in new building. The supplying of a serious deficiency in residence property was checked by abnormally high costs, now at last coming down. Deferred requirements in this direction are an important reserve for business activity in the spring of next year. Measured by dollar indices, August showed relative improvement over July and June."

Conditions in the United States are on Sounder Basis

Improvement in business, while largely seasonal, is believed by the National Bank of Commerce of New York, to be sound in character. In its review of the business situation issued towards the end of October, it remarks:—

"The last thirty days have been characterized by slowly improving sentiment and by some expansion of production. The most marked gains have naturally been in those lines where recovery has been the longest delayed. Bituminous coal production is increasing, and while partially seasonal, this to some extent is due to enlarged operations in the iron and steel industry, which is now running at about 40 per cent. of capacity. There has been less change in the rate of production of other leading industries, but gains made since midsummer have so far held. Activity in the building trades is well maintained.

"Autumn buying is reflected in an improved retail dry-goods trade. It is noteworthy that this betterment is more marked in rural districts than in industrial centres. This is clearly the result of the marketing of cotton and grain crops at fairly satisfactory prices, and affords grounds for confidence that the extreme depression in the agricultural industry of the United States has definitely passed.

"Wholesale prices of a number of raw materials have advanced since September 15, while the markets in several lines have been somewhat more active. Caution on the part of the wholesale trade has served to keep the volume of manufacturers' advance orders

small, but frequent repetition of orders for immediate delivery has thus far served to render the present basis of operations fairly stable. There is no doubt that the improvement which has thus far taken place is more or less seasonal in character, but it is nevertheless true that the progress made toward normal business is sound. Such temporary setback as may occur after the autumn buying should, therefore, bring no discouragement. Viewing conditions as a whole, the facts justify conservative optimism as to the future."

Despite Poor Business, Practically No Unemployment in France

A view of French business from the standpoint of the American exporter is provided by J. F. Butler, United States Trade Commissioner in Paris. Writing in *Manufacturers' News*, he supplies the following details,—

"France is at present passing through a period of business depression which began early last fall. The liquidation of the stocks of merchandise accumulated at that time has progressed rather slowly, but indications are that the end of the liquidation process is in sight. Although business continues bad, it is felt that the low point of the depression has been reached and that conditions are slowly improving. French business is extremely conservative and that fact, coupled with the lesson taught by the crisis, accounts largely for the cautious manner in which orders are being placed now, and may be for some time.

"France is now doing without merchandise which under normal circumstances it would import in large quantities from abroad. Its consumption of such merchandise is being reduced to the lowest possible point. That numerous articles which the United States could export—machinery of all sorts, reconstruction material, etc.—are badly needed is only too evident. However, under present exchange conditions it is unable to pay for foreign goods unless long term credits are furnished. It must have raw materials and payment therefor must be made at comparatively short intervals. Certain manufactured articles which are most urgently needed must be bought abroad in spite of the difficulty of financing such purchases. The main point is that a large part of the trade which we might normally expect to do with France can be effected only through the granting of long credits—credits of three and five years and in some cases even longer.

"The foreign trade balance of France has shown a marked and steady improvement since the end of the war. Imports of raw materials during the past twelve months indicate a great increase over those of the year before, constituting about one-half the total French imports. Imports of foodstuffs have fallen off greatly during the past year. Imports of manufactured goods have decreased, while exports of such goods have shown an important increase.

"Previous to the business depression the French were in numerous industries working far more than the legal eight-hour day. At present, despite poor business, there is practically no unemployment, though many industries are operating on a part-time basis.

"Based on an index figure of 100 in 1914, the average cost of living for twenty French departments had increased to approximately 375 at the end of 1920. There has been only slight decrease in the cost of living since that time.

"The general ratio of wages to the cost of living is practically the same as before the war. In certain industries wages are proportionately much higher. The process of scaling down wages has been under way for some time. Many lines of industry have accepted slight wage cuts without much protest.

"The farming outlook is better than at any time since the beginning of the war. The land is intensively worked, due to the fact that it is split into comparatively small parcels. The percentage of agricultural workers who own their own farms is very high. Reclaiming of land in the devastated regions is progressing rapidly. Of 5,350,000 acres of tillable land in those regions, in 1914, over 4,570,000 acres are again in shape for cultivation.

"The cereal crop this year was in general good. Other crops were fair, in spite of the dry weather during the past summer. The wheat crop was excellent. France is a large consumer of wheat, bread constituting a larger item in the workers' daily diet than is the case in most other countries. The burden of financing wheat imports during the past few years has been a severe one and the prospect of a marked reduction in such imports is hailed with joy.

"However, in this connection, the following facts should be noted. The wheat crop this year was extremely precocious, harvesting taking place about a month before the usual harvest time. The result is that French wheat came on the market that much in advance of the ordinary time. Whereas up to August 1, 1921, under the government control of cereals, wheat flour was mixed with other cereals for breadmaking purposes, all-wheat flour is now being used for that purpose. The millers are making every effort to regain their old customers who were alienated as a result of war measures regarding the distribution of flour and there is keen competition between them. It is predicted that the consumption of wheat will be greater this year than during any year since the beginning of the war, due to the fact that flour substitutes are not being largely used, and also because the improved quality of the bread will result in a greater consumption of it. Wheat from other countries will undoubtedly have to be imported into France far in advance of the usual time. The French hope that the Algerian crop will be a big factor this year in supplying their wheat requirements."

Swiss Exports After Decline Are Now Increasing

In a review of the foreign trade of Switzerland, appearing in the November issue of *Commerce Monthly*, published by the National Bank of Commerce in New York, attention is given to the contraction in Swiss exports and the consequent increase in the adverse trade balance.

"Switzerland, like the United States, suffered a sharp decline in foreign trade values in the first six months of 1921. As compared to the second half of 1920 exports declined 33 per cent. in value and imports 36 per cent. The tendency toward an increase in the unfavorable balance of trade was regarded with grave concern in 1920, but a progressive contraction of imports in 1921 reduced the excess of imports to a comparatively small figure in the second quarter of the year.

"For many years before the war a considerable adverse balance was a regular feature of Swiss trade. It was counteracted in large measure by various "invisible" exports, principally the expenditures of tourists, which were a source of income to a large proportion of the population, and services involved in the trans-shipment and re-export of foreign goods. During the war the adverse balances were very much reduced, despite the fact that both imports and exports greatly increased in value, and in 1916 there was a small favorable balance. In 1920, however, the continued expansion of the import trade was not accompanied by a proportionate increase in exports so that in

this year there was an adverse balance of nearly one billion francs, or almost double that of any previous year. In consequence exports in 1920 were but 77 per cent. of the value of imports, compared to 93 per cent. in 1919.

"This was the more serious in that the compensating "invisible" exports had greatly diminished. The high exchange rate of the Swiss franc in relation to the currency of neighboring countries served to deflect the stream of foreign goods which formerly passed through the country into other channels, less direct but offering cheaper transportation. The exchange rate, too, had a part in retarding the recovery of the tourist traffic, which was still suffering from the effects of the war."

"The principal exports from Switzerland are clocks, watches and fine instruments, silk, cotton goods, embroideries, machinery, aniline dyes, chocolate and hats and shoes. As is indicated above England, and France were in 1920 the principal markets. The higher mark was reached in 1919, since when exports have gradually receded, due largely to the conditions of the foreign exchanges and the determination of neighboring states to restrict their foreign purchases to necessities, as well as to increased labor costs in Swiss industries. The improvement in exports from April to June must be continued at an even higher rate if a large unfavorable balance this year is to be avoided."

Japan's Hopes For Improvement This Fall Not Realized

In a detailed review of conditions and prospects in Japan, *Eastern Commerce* for October supplies the following information about the situation,—

"The show of prosperity that was in evidence in the Japanese business world in August was suddenly snuffed out in the early part of September, and the shadow cast by the depression in foreign trade and the falling off in gold holdings became darker. Slumps were recorded everywhere. The reaction this introduced was, however, short lived, and now, again, bright spots are making their appearance. New price advances are registered in major commodities, some of which are, indeed, at the highest point of the year. While this state of affairs engenders a hopeful feeling it is doubtful whether business can continue to drift in this improved direction, in view of the worse condition of Japan's outward trade.

"In the latter part of August the stage was set almost completely for a commercial revival. The flood of capital that had been rising was at its highest mark and bankers felt it no easy task to restrict credit. Some of them dropped their old policy of stopping the supply of speculative funds. The dead stock of various commodities also continued to fall off, although the rapidity of decrease was much reduced, and the average prices of commodities were rising higher perceptibly. Everyone regained confidence in the autumn prospects. This was a good chance for speculative people, who had been working hard on the strength of the easiness of the monetary situation, to restore the business world to prosperity, and though the shadow cast by Japan's outward commerce was darker it was not of much moment in their eyes."

"It was the hope of the Japanese business public in the first half of this year that the adverse trend of foreign commerce would come to an end in July, and that in August the export trade might be in excess of the import trade. The hope was founded on the usual trend of outward commerce before the war and the fact that as a rule the raw silk trade expanded in the latter part of the year. But this hope was badly betrayed in July. In August, again, the hope was shattered,

although the value of outward commerce commenced to increase, and it was shown convincingly that any relief from this direction was impossible."

"September has also proved a disappointment to the Japanese business world, its trade balance being unfavorable to the country."

"As regards the immediate future, speculative people hold optimistic opinions because the storm in the earlier days of September passed without leaving many wrecks in its track and the money market is again easy. But there are a number of serious factors ahead which may even eclipse the easiness of the money market. The unscrupulous boosting of the grain price at this time of the year will result in robbing ordinary consumers, exclusive of farmers, of their buying capacity, for they have now a narrow margin left, owing to the exhaustion of their war-gained money and the increase in unemployment. The retail trade at the end of the year, which is the greatest buying season in Japan, will be the worst ever known. The cotton yarn market as boosted up, and the raw silk trade—which is also being boosted on the ground that the Autumn cocoon crops are bad—will on the other hand accentuate the depression in the export trade, while owing to the upkeep of high commodity prices and the holding of more gold at home than is necessary the import trade will go on increasing rapidly—already its signs are clearly noted. The efflux of gold, which has already begun, will thus be accelerated, and there are no signs of a speedy return of prosperity."

New Zealand Economic Conditions are Reviewed

In his report on the financial and commercial conditions in New Zealand as in July last, H. M. Trade Commissioner at Wellington shows that the past few months have witnessed a very rapid change in the economic conditions of New Zealand. Past reports have indicated that during the war years prices realized for New Zealand's produce had brought a period of unprecedented prosperity. This prosperity continued for some time after the war and it was not until well on in 1920 that any change became apparent. The belief appeared to exist amongst the producing and trading communities that the favourable conditions which New Zealand had enjoyed could continue almost indefinitely, and in spite of repeated warnings from authoritative sources there was little disposition shown either on the part of the general public to check extravagances or on the part of the trading community to call a halt in operations. The inevitable result has been that, temporarily at least, the financial resources of the Dominion have been strained almost to their limit.

It is hardly necessary here to recapitulate at any length the circumstances which have brought about the conditions referred to. There are, however, one or two outstanding factors to which it may be well to refer now, because they may still bring about more serious conditions unless prices of New Zealand produce improve considerably in the near future. The first and probably the most important of these factors is the high prices at which land has changed hands. For dairying land prices over £200 per acre, though probably not common, have not been altogether exceptional; for sheep land, too, phenomenally high prices have ruled, and considerable sales of both have taken place almost always attended by heavy mortgages. It will readily be understood that under such circumstances very serious falls in the ruling

prices of produce have been a source of considerable embarrassment to the new holders in particular, and it is certain that, had it not been for the extension of the moratorium on mortgages which was brought into effect last session in Parliament, many of the new holders would have been driven out. The question of whether these lands can ever be made to pay at the prices which have been paid for them would probably give rise to considerable discussion, but there are some authorities with a long experience of New Zealand conditions who think that it is not improbable that in the not very far distant future even higher prices than those which have ruled generally will be justified by production. It is clear even to the casual observer with a short experience of New Zealand conditions that costs of production could materially decrease, that quantity of production is capable of very large increase, and that costs of transport and distribution at the present time are much above what they should be. While it may be cold comfort at the present time to those who are embarrassed by these high priced lands, it is not improbable that the high prices themselves may in time lead to a very important improvement in farming conditions and in methods of transport and distribution, which, will eventually be all to the Dominion's good. Moreover, in considering these prices, which must seem outrageous to people in the United Kingdom, it has to be remembered that New Zealand is so much favoured in many ways as compared with the United Kingdom in anything which affects agriculture that there can be no basis of comparison between values of land in the two countries.

Another factor which has seriously embarrassed New Zealand is the arrival in the Dominion of large quantities of imported goods far in excess of the exports from the Dominion. The circumstances under which many of these goods have been delivered have given rise to very severe criticism of British trading interests on the part of consignees in New Zealand. The imports for the year 1920 amounted to £61,595,828 in value, as compared with exports of £46,441,946, making an apparent adverse trade balance of a little over £15,000,000. This adverse balance is, in fact, even greater than the statistics show, owing to methods of valuation by Customs giving a lower statistical value for imports than the actual landed value. Again, it is to be remembered that a very large part of the produce of New Zealand which was shipped last year had been paid for by the Imperial Government in the previous year. It thus follows that the amount actually received for exports in 1920 was small as compared with very large payments for imports, and that even the large excess of imports shown in the statistics does not at all represent the disparity between money paid for imports and money received for exports. This disparity was a very serious strain on the facilities of the country and is in a large degree responsible for the financial stringency which has existed. A further disturbing feature has been created by the practice of trading firms, and particularly stock and station agents, accepting money on deposit from their customers. In this country the stock and station agent is a very important factor in trading operations both inwards and outwards, and back to the earliest days of settlement it has been his practice to act in the capacity of banker for a great many of his clients. This, too, he has been able to do without any provision by legislation for the keeping of reserves such as must be kept by banks. As a result of the conditions of the past few years it follows that very large sums of money have been deposited in the hands of these firms. Being importers on a large scale they have been affected as other importers have by

heavy deliveries of goods on a falling market, and as their deposits have been used for general trading purposes they now find themselves unable either to meet applications for withdrawal themselves or owing to general financial stringency to secure advances in aid from the banks. So serious did the position become that the Government passed a measure to provide relief for a time from withdrawals. This in itself has caused further embarrassment amongst those whose money is tied up, but it has unquestionably helped to tide over a difficult period and to avoid further financial strain which might have led to the most serious results.

On the whole, therefore, the position of New Zealand has been a very anxious one, and pessimism has been rife throughout the Dominion. A better feeling has been apparent recently owing to a slight hardening of some markets for New Zealand produce. It is the personal opinion of H. M. Trade Commissioner that New Zealand has been caught only by the tail of the storm which has been felt in its full force in other countries, and that it is not unlikely the conditions will now gradually improve. Certain it is that with a country so productive and with conditions so favourable, recuperative powers must be good, and there can be no question that development must proceed. All that is needed at present is careful handling of a difficult financial situation and a willing effort on the part of the primary producers of the country to meet their own difficulties by better, and therefore more economical methods of production.

Conditions are Improving in Chilean Business

The commercial situation in Chile is beginning to improve, following the recent advance in exchange, according to a cable from Reuters' Trade Service at Santiago.

"The rise in the value of the peso is attributed largely to the explosion at the big nitrate plant at Oppan. It is believed that Germany will now be compelled to purchase large supplies of the Chilean product. A bill was introduced in the House last month providing for a ban on imports from countries which prohibit the purchase of Chilean nitrate. This measure, which was directed mainly against Germany, was not approved by Congress, although it indicated very clearly that Chileans favor the imposition of a legal boycott against goods manufactured in Germany, if the latter country succeeds in the attempt to prohibit the importation of Chilean nitrate.

"Nearly all the merchandise which has been stored in the Customs Houses at Valparaiso and other ports has been cleared and importers are preparing to resume business on a more active scale. The recent cable from Washington stating that American government officials had referred to the financial crisis in Chile as a thing of the past, was much appreciated in commercial circles here, and the feeling gains ground that prospects of an early resumption in business with the United States and Europe are excellent."

WHAT ARE WE COMING TO !

Employees of the company are extremely well housed and cared for. For example in the bush operations every camp is equipped with steel bunks and mattresses.

—MANITOBA FREE PRESS

The British West Indies as a Market for Canadian Manufactured Products

By W. P. HUGHES

Published by arrangement with the Canadian National Export Club

PART III.

IT remains for Canadians to demonstrate that they can do business on as satisfactory terms, and with the same degree of excellence in service as the British merchant before they can hope to cement the good-will of the people of the British West Indies to Canadian trade. An indication of how imports from the United Kingdom are regarded is shown in the increase from \$12,042,650 in 1918 to \$15,263,960 in 1919. The figures for these years are indicative of what Canada may hope for in the future:

IMPORTS INTO THE WEST INDIES

	From U.K.	From U.S.	From Canada
1918.....	\$12,042,650	\$26,943,020	\$ 8,886,796
1919.....	\$15,163,960	\$32,604,289	\$12,958,822
Increase.....	26.7%	21%	45.8%

While Canada's increase is much larger than that of either of her competitors, it is significant that the United Kingdom comes second rather than the United States.

One deduction that can be made from these statistics, and one that is borne out by the facts is that the competition of the United States is especially strong in the Western group, i.e., the Bahamas, Jamaica and British Honduras. Before the inauguration of the Canadian Government Merchant Marine service to these countries, the only direct steamship connection from Canada to the Bahamas or Jamaica was a monthly boat out of Halifax. There was none to British Honduras at all. On the other hand, several lines, chief among which is the United Fruit Co., have established excellent service out of American ports, and as a consequence United States shippers are strongly entrenched. The trade of Jamaica will illustrate this position. It is the second largest buying centre in the whole of the market, and since 1914 has increased its purchases in the United States approximately threefold. The figures:

	Total Imports	From U.K.	From U.S.	From Canada
1914.....	\$12,426,250	\$4,742,046	\$ 5,941,718	\$1,016,573
1918.....	16,428,884	2,637,879	11,101,630	1,583,218
1919.....	23,998,054	3,920,012	16,373,472	2,572,275

It is true that United States importers have gained this increase at the expense of the United Kingdom rather than Canada, but it is also true that if Canada is to materially increase her exports to this island it must in turn be at the expense of the United States. The imports from the United Kingdom will increase as conditions in that country become more settled, so that the only hope for expansion, apart from a share in the normal growth of the market, is a substitution of Canadian made goods for those of the United States. This substitution will not be easily obtained. If Canadians put their

Canadians will, if they are wise, approach this subject of the extension of credit by determining the class of the merchant in question. With those of the first group, he may deal as freely and with as little risk as he does with the better class of Canadian business houses. Competitors offer these merchants goods on very favorable credit terms, varying in length of time in different classes of commodities. The general terms are up to thirty days, documents to be delivered on acceptance of drafts, but in some instances, such as particular lines of hardware, this may be sixty or even ninety days. Canadian exporters will find it necessary to do likewise.

faith in an Empire spirit and even a tariff preference rather than in intelligent merchandising, backed up by adequate and regular steamship service, the largest percentage of Jamaican imports will continue to come from the United States.

It is not the intention to discourage potential Canadian exporters, but to clearly and frankly indicate the competition, that it may not be underestimated.

Canada's Ability to Supply Market

The question naturally arises, "Do Canadians produce or manufacture all the var-

ieties of goods that the West Indians buy, and, if so, do they do this in sufficient quantity to supply the demand?" The correlative question is, "In what commodities may Canadians best hope to increase their exports to this market?"

An examination of the list of commodities covering the chief imports of the West Indies, previously given, will answer such questions as fully as they can be answered, short of actual experience and demonstration. Of the sixty-three different classes of commodities there enumerated, Canadians are at present supplying, in various amounts, sixty-two. Silk is the only item where Canada is not shown as shipping anything. The presumption is, therefore, that Canada does produce or manufacture every class of goods that the West Indians want to buy.

Could Supply Demand in Full

As to supplying the demand in full, the statistics of Canada's total exports show that with few exceptions these are larger than the corresponding total imports of the West Indies.

A partial list will illustrate this fact:

	Canada Total Exports	West India Tot. Imports
Flour.....	\$ 99,931,659	\$9,246,264
Cotton Goods.....	3,422,993	8,926,193
Fish.....	36,392,626	3,515,234
Wood.....	105,980,419	3,423,526
Machinery.....	7,048,797	3,214,326
Manures.....	4,990,749	3,066,676
Meats.....	85,590,161	2,745,005
Hardware, Cutlery, Imple- ments, etc.....	12,807,860	1,560,807
Boots and Shoes.....	1,130,334	1,521,071
Drugs, Chemicals and Medicines.....	12,964,104	1,500,666
Butter and Substitutes.....	6,140,864	1,463,575
Fruits and Vegetables.....	16,993,209	1,305,492
Tobacco.....	5,394,535	1,284,837
Soap.....	560,025	1,274,178
Vehicles.....	27,333,203	1,250,915
Apparel.....	13,529,092	1,195,740
Paper.....	47,862,909	995,277
Cement.....	15,945	934,712
Milk (Condensed).....	7,035,297	687,905
Cordage, Rope & Twine.....	3,032,693	643,863
Hats and Bonnets.....	44,710	468,524
Woollen goods.....	3,518,850	440,667
Paint and Varnishes.....	1,800,025	386,233
Matches.....	113,405	287,146
Books.....	392,317	228,789
Glass and Glassware.....	36,145	217,245
Rubber.....	115,292	147,744
Furniture.....	155,264	86,882
Brooms and Brushes.....	118,019	82,096

Such a comparison indicates that it is possible for Canada to meet the demands to a remarkable extent, or at least to greatly increase the present volume of business.

Room for Development

Considering the question of individual commodities, the list shows that there is room for development all down the line. The writer's own observation with respect to exceptional opportunities in the case of several classes of commodities is confirmed by these figures. Hardware, including implements, tools and ship's hardware, machinery, such as plantation machinery and special types of agricultural machinery, pumps engines and small tractors, rubber goods, drugs, chemicals and medicines, food-stuffs, as butter, lard, fruits and vegetables, dried and salted meats, canned meats, fish and fruits, condensed milk, cheese, biscuits, ale and beer, cotton piece goods, wearing apparel, hats and bonnets, haberdashery, millinery, perfumery, soaps, paper, cement, cordage,



A Fruit Stand in the Market, Nassau

—Illustration by courtesy H. J. Waddie, Hamilton

twine and rope, paints and varnishes, matches, glass and glassware, tin and enamelware, wood and manufactures of wood, electrical apparatus, jewelry and plate, musical instruments, furniture, blacking and polishes, all are commodities, in the export of which, Canadians can make material gain, provided they go after the business hard enough, and in the right manner.

Constructive Suggestions

A positive, not a negative attitude, is necessary if Canadians are to convert this potential business into actual trade. They will not get it if they stay at home and wait for the buyers of these countries to come to them. Competitors will see to it that this will never be necessary, and Canadians cannot expect that they will pass by supplies offered them at their door and come to Canada looking for goods.

They must go after the trade with all the energy and intelligence they have. It is also just as true that they will never secure the desired results if their efforts are intermittent or anything but persistent. If they offer to this market only the occasional surplus of stock, after other markets, domestic or foreign, have been served, they will fail to build up anything like a satisfactory volume of trade. Special production and a constant supply are two essential requirements. If West Indian merchants can get goods elsewhere that suit them, and can get them in regular shipments from other sources in comparison to a "take it or leave it" attitude on the part of Canadians, coupled with an uncertain supply, and even if either of these conditions exist in connection with Canadian business, the good-will and patronage of these people will go elsewhere.

Advertising Required

In addition, Canadians must be prepared to spend money in advertising and other aids to merchandising. A demand has to be created for new brands or makes before West Indian merchants will feel disposed to stock very heavily. They advertise in the local papers and trade bulletins, but in many cases Canadians will have to follow the lead of competitors in this connection, and supplement such advertising with their own. This advertising should be specially prepared from the standpoint of market conditions and should be judiciously used.

General trustworthiness in all business practices and rigid honesty in such matters as shipping goods according to specification or samples will also exercise a large influence on the outcome. "Satisfied Customers" should be the slogan that guides Canadians in their business relations in this market, just as it is between Canadians at home. Small matters like prompt and courteous replies to correspondence, and quick responses to enquiries will mean much in their favor. The importance of dispatch in filling orders and of getting shipments off on time cannot be over-estimated. If Canadians are slow or fail to make deliveries when promised, the West Indian buyers are put to great inconvenience, and if the shippers of the United Kingdom and the United States are more on the job in this respect, that alone will swing orders to those countries. Invoices, certificates of origin, drafts, and other documents in connection with shipping should be most carefully made out and forwarded with sufficient promptness to absolutely insure their arrival with the goods themselves. Provision should be made that drafts will not be presented for acceptance or payment before the goods reach their destination, but on the other hand, buyers will be caused considerable extra expense if these documents are not on hand when goods are delivered to the Customs at their end.



Unloading Bananas, Stann Creek Dock, British Honduras

—Illustration by courtesy H. J. Waddie, Hamilton

Follow Instructions

Packing and marking of cases should be done by competent persons who understand the conditions and requirements of transportation. An illustration of how Canadians sometimes hurt their chances for increased business by failing to follow special instructions from buyers lately came under the notice of the writer. A buyer in Belize, British Honduras, ordered a certain quantity of Canadian cheese as a trial shipment, and instructed the exporter at this end to pack the round cheese in square boxes with salt around them to preserve and protect the cheese from the heat. This was not done, and the trial was a failure. How far Canadians can afford to make such adjustments is a matter for them to decide, but certain it is that if they want the business they will have to take such adjustments into consideration and be governed thereby.

QUOTATIONS should be in Canadian currency, and C.I.F. point of destination. It is a decided mistake for Canadians under any circumstances to quote in U. S. currency. The writer cannot see how this is ever necessary, and when it is done, the immediate impression in the mind of the buyer is that Canadians are trying to take advantage of the difference in exchange that is not by right due them, and this suspicion of sharp practice is not calculated to engender faith in Canadians or their business methods.

Extension of Credit

The necessity of quoting C.I.F. and of extending credit has already been pointed out. Something more as to the actual extension of credit might be constructive. The merchants in the West Indies can be classified in three groups, just as readily as merchants in Canada. First, there are those who have substantial capital and a long record for fair dealing with buyers and sellers. There is the second class, whose money resources are less, but whose record for honesty and dependability is just as clear, and there is the third group, who may or may not have money, but whose record is clouded with unfair dealings and shady methods. There is also a possible fourth group made up of new business enterprises who have not been in existence long enough to demonstrate to which of the above classes they belong.

Canadians will, if they are wise, approach this subject of the extension of credit by determining the class of the merchant in question. With those of the first group, he may deal as freely and with as little risk as he does with the better class of Canadian business houses. Competitors offer these merchants goods on very favorable credit

terms, varying in length of time in different classes of commodities. The general terms are up to thirty days, documents to be delivered on acceptance of drafts, but in some instances, such as particular lines of hardware, this may be sixty or even ninety days. Canadian exporters will find it necessary to do likewise.

With merchants of the second group, more specific information as to the financial responsibility and its relation to the existing obligations of the customer should govern the credit extended.

With those in the third class great care must be exercised if losses and disappointments are to be avoided. In fact, it would be the writer's suggestion that with such merchants business should be refused except on the basis of letter of credit here in Canada, unless the Canadian exporter has a local connection on the spot who can be relied upon to look after his interests and if necessary assume proprietorship in goods on his behalf. The best means of obtaining this information short of personal contact is the Canadian banks, and again their good services are recommended to those interested in export trade with the West Indies.

Organization For Export

Where an individual business is financially strong enough and the volume of business to be done will bear the greater overhead expense of supporting travelling salesmen, and a special export department within the organization, there is little doubt that the best

They must go after the trade with all the energy and intelligence they have. It is also just as true that they will never secure the desired results if their efforts are intermittent or anything but persistent. If they offer to this market only the occasional surplus of stock, after other markets, domestic or foreign, have been served, they will fail to build up anything like a satisfactory volume of trade. Special production and a constant supply are two essential requirements. If West Indian merchants can get goods elsewhere that suit them, and can get them in regular shipments from other sources in comparison to a "Take it or leave it" attitude on the part of the Canadians, coupled with an uncertain supply, and even if either of these conditions exist in connection with Canadian business, the good-will and patronage of these people will go elsewhere.

results will be obtained by sending representatives to the field, with samples and quotations at regular intervals. Such a procedure is especially valuable for the opening up of new avenues of trade and the establishing of new goods on the market. If level-headed, clear-thinking salesmen visit the territory in the interests of their firms, they cannot fail to acquire much definite information that will enable the principals to advance the volume of sales much more rapidly and with greater ease and safety than is possible under any other method.

If the employment of some export or import commission house or agency is found to be more practicable, two things should receive the best consideration of the manufacturer in making such an arrangement. First, honesty in business ideals and practices, and, second, ability to get the business and to handle it properly after it is secured. Provided these fundamentals are reasonably assured, the manufacturer should yet be prepared to co-operate with such representative in the closest possible manner. It is not enough to grant an agency agreement to some such organization, then sit back and expect them to get the best results working alone. Nine times out of ten this will not happen, and a change of agencies will not necessarily improve matters much. The manufacturer would find that such an attitude toward any department of his organization was not conducive to speedy development, and after all, such an arrangement for export trade is really the introduction of a new department more or less closely affiliated with the rest of the business according to the terms of the agency granted.

Exclusive Selling Rights

Whatever may be the case in other markets, it is important for manufacturers, if they are employing such agency methods for developing their trade in the West Indies, to seriously consider the advisability of granting exclusive selling rights rather than allowing different agencies to offer their goods on the same market. The West Indian buyers do not like this practice, and will give the preference every time to the representative who can show control of distribution for his neighborhood. The annoyance of having various salesmen call and offer the same commodity, and the possibility of different prices for the same commodity are thus avoided.

In short, the exclusive salesman is in many ways the easier and safer to deal with, and this additional feature to an agency arrangement is, from this viewpoint, calculated to increase rather than hinder sales.

The possibility of manufacturers getting together or in groups for co-operative export endeavor in this market should not be passed over lightly. In a very simple form this can be done by two or three manufacturers who turn out non-competitive, yet related lines, getting together and sharing the expense of sending a salesman to this field to represent them. The necessary funds are usually advanced in equal proportions and adjustments made later on the basis of orders taken. There is no other overhead expense attached to such a scheme. Orders are sent direct to the company concerned, and all business is handled by the members of the group as individuals. Co-operation in this way has worked out very satisfactorily.

It is the writer's conviction that the same results would follow if similar associations were formed on a larger scale, and the actual business of exporting was carried on through a central organization. Such a plan would necessitate the raising of adequate funds to provide capital for carrying on the work of selling and for office accommodation, together with sufficient clerical help to handle the

correspondence, shipping documents, and other routine matters incident to export trade. The financing of shipments made could still be left to the member concerned, and all orders would be subject to their confirmation. Adjustments could be made periodically on the basis of business done, to cover the cost of maintaining the central organization, with a minimum contribution as a fee for membership.

Accurate information would be collected and distributed to the members, possibilities for development of trade would be thoroughly investigated, the work of securing business and of having it expertly handled when

secured, would all be done at less expense to any one member than in the case under individual endeavor.

If such a group could be organized in the near future, and if they properly introduced themselves and their goods to West Indian buyers by some such means as a tour in this territory with samples during the coming summer, the members of that group would be seizing an opportunity which at the present moment is unique.

(This completes Mr. Hughes' valuable series of articles on the Trade of the British West Indies. The first article appeared in the September issue.—THE EDITOR).

Engineering Standards Association's Work

By R. J. DURLEY

Secretary, Canadian Engineering Standards Association

THE sixth meeting of the main committee of the Canadian Engineering Standards Association was held in Ottawa on October 17, with H. H. Vaughan in the chair.

After the transaction of formal business regarding appointments, resignations and changes in membership of the various sectional and sub-committees, the Secretary's report on the work accomplished since the last meeting was presented and approved.

During this period, meetings of working committees have been held as follows:

Cement.....	June 27, 1921
Watt-hour Meters.....	Aug. 25, 1921
Steel Railway Bridges.....	Sept. 12th and 26th
Steel Highway Bridges.....	Sept. 12th and 26th
Panel on Bridges.....	Oct. 3rd-6th

The list of publications of the Association now stands as under:—No. 1-1920—Standard Specification for Steel Railway Bridges; No. 1A-1920 Standard Specification for Steel Railway Bridges (Separate reprint of Material Specifications); No. 2-1920 Standard Requirements for Distribution Type Transformers; No. 3-1921—Standard Specifications for Galvanized Telegraph and Telephone Wire.

The specification for wire rope, as approved by the main committee in August, is now in the press and will shortly be issued.

The specification for steel railway bridges (No. 1-1920) being now out of print, active steps are being taken in preparing a new edition, in which a number of important alterations and improvements are being incorporated, with a view to bringing it into agreement with the most recent practice of the large railway administrations.

The first draft of the highway bridge specification has been amended and is now being held, in order that it may be brought into general conformity with the provisions of the revised railway bridge specification.

The work of the sub-committees on incandescent lamps, wood poles for transmission lines and watt-hour meters is actively proceeding.

The committee approved the list of members for the sub-committee on concrete and reinforced concrete and it is expected that this committee will commence its work at an early date with a view to preparing general specifications for these materials, based on the existing specifications of the Engineering Institute of Canada.

The specification for portland cement is being finally revised by the sectional committee and will be submitted to the main committee for approval and publication at an early date.

The committee next considered a number of suggestions as to future activities, and a communication forwarded from the Brantford Chamber of Commerce to the Depart-

ment of Trade and Commerce, and passed to the C.E.S.A., was laid before the committee in which attention was drawn to the desirability of Dominion-wide standardization of fire hose thread and couplings. The Committee felt that this question is of considerable importance in Canada and the Secretary was directed to communicate with various authorities concerned including the fire underwriters and the fire marshals to obtain their opinions as to the best course to be taken.

The Secretary reported that discussions were proceeding as to the best method of co-operation with the American Engineering Standards Committee in connection with their work on the safety code for elevators, the safety code for logging and sawmill machinery, tolerances on shafting and standardization of gearing; in the latter case the Association having been requested to nominate a representative to attend the meetings of the C.E.S.A. Sectional Committee.

Reports were presented regarding various points which were considered at the conference of secretaries held in London in May, and the committee approved the scheme for the systematic interchange of information between the various national standardizing bodies as to the condition and progress of their work.

The scheme outlined for the interchanges of publications of the various national standardizing Committees was approved as far as the C.E.S.A. is concerned.

Suggestions from the Dutch and Swedish standardizing committees were considered, respectively dealing with the round numbers to be adopted in official publications in giving the metric equivalent of inch sizes, and in regard to international action looking to agreement on the width across flats of nuts and bolt heads. Further enquiry and correspondence was directed in both these cases.

Discussion followed on points regarding organization and policy. A scheme for the periodical revision of the lists of members of working committees, and arrangements for the periodical revision of specifications were considered and approved.

The Secretary reported the receipt of certain standard specifications issued by the Australian Institute of Science and Industry, and the interchange of publications with this Institute was authorized.

Correspondence, with offers of co-operation and assistance, was read from the Canadian Electrical Association and from the Electrical Co-operative Association of the Province of Quebec, and the committee expressed its appreciation of the kindness of these organizations.

The auditor's statement for the six months ending September 30th was presented and was approved as being satisfactory.

What Was Accomplished by the Produced-in-Canada Campaign at Fall Fairs

By O. C. PEASE

Travelling Secretary, Ontario Division. C. M. A.

THE "Produced-in-Canada" campaign which was inaugurated by the Association at the opening of the Canadian National Exhibition in Toronto and which has been carried through the other large exhibitions and over two hundred fall fairs in Eastern Canada, has been brought to a most successful conclusion.

Apart from the larger exhibitions in such centres as Toronto, Ottawa, London, Sherbrooke, Three Rivers, Quebec, St. John and Charlottetown, there were in all 429 agricultural fairs held in Canada at various points east of Fort William. To cover a territory so immense, required intensified organization, and the efforts not only of the Association's officials and staff, but the most whole-hearted support of members of the Association and public-spirited citizens generally. The success which attended the campaign witnesses most favourably for the spirit of co-operation afforded by the various interests appealed to, and in this respect, particularly, acknowledgments are due to the many agricultural societies in Eastern Canada which lent their whole-hearted support to the national idea.

In all, the Association had printed 9,000 large cards bearing the words, "Keep your Fellow Canadians Employed by Buying Canadian Products and Manufactured Articles"; 14,000 small cards bearing the words, "Produced in Canada"; and 350,000 pamphlets giving brief statistics of Canadian imports amounting to \$300,000 annually of materials which could and should have been grown or bred or produced or made in Canada in order that Canadian workmen might save annually \$100,000,000 in wages.

The allotment of the cards and pamphlets was arranged in proportion to the needs of the various Divisions as illustrated by the number of fairs to be covered.

Out of the 429 fall fairs in Eastern Canada, 316 were held in the Province of Ontario, and consequently that Province received a larger share than the others. The distribution, however, was carried out most successfully, and in the case of each Division met the requirements to a nicety. The bi-

lingual difficulty in the Province of Quebec was taken care of by having the material printed in the French tongue.

Previous issues of INDUSTRIAL CANADA have contained many indications pointing to the success which attended the Campaign at various points. In summarizing the results, however, it might be well to draw particular attention to the following points:

1. That only an approximate half of the Canadian fall fairs contained manufacturing exhibits, and that these were fully covered with "Produced-in-Canada" material. The suggestion in this instance is that there were approximately 200 agricultural fairs held this year at which the

accumulated attendance would amount to almost one-half million people, and at which manufacturers did not exhibit.

2. That the personal supervision of the fairs which were covered by the Association produced little but the most favourable criticism and comment, illustrating the fact that the sympathy of Canadians is strongly in favour of home products.
3. That shop-keepers and retailers generally reported a strongly increased demand or at least inquiry for Canadian products.
4. That the tenor of correspondence received by the Association from agricultural societies reveals an appreciation of these organizations for the national idea expressed by the Association in the selection of the words, "Produced-in-Canada", instead of "Made-in-Canada", as the slogan for Canadian products.

5. That the total estimated attendance at the larger exhibitions and fall fairs actually covered by the "Produced-in-Canada" Campaign amounts to approximately one-quarter of the total population in Canada.

Even a casual summary of the foregoing should illustrate the splendid effectiveness of the Campaign, and provide sufficient incentive to encourage Canadian manufacturers to maintain the effort which they have made in the past.

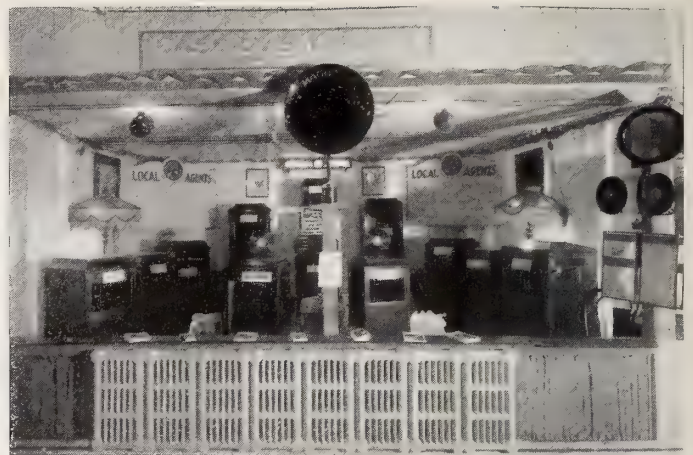
It would be difficult to estimate accurately the effect of the campaign. With regard to the display

cards, the black-and-white reproductions were sufficiently distinctive to stand out most strikingly, and it is safe to assume that few people who attended the exhibitions and fairs could have failed to have seen them. The allotment of pamphlets was a more difficult task, and the distribution at the various points had to be arranged in accordance with local circumstances. In the majority of instances small quantities were given out to exhibitors who were asked to distribute them with their own literature, — and as even in a moderate-sized fair there would be half a



Produced in Canada Cards Figure Prominently

Above is exhibit of T. McAvity & Sons, Limited, St. John, N.B., at St. John Exhibition, a feature of which was showing of actual operations from molding of rough casting to completion of half-inch compression bibb. Below is display at Kingston Exhibition arranged by Jos. Bleakley, district representative of the Canadian Packing Company, Limited.



Association's Cards at Winnipeg Shoppers' Exposition

On the left, the exhibit of Canadian Toledo Scale Co., Limited, and on the right, that of Cassidy's Limited, wholesale distributors for Columbia products in Western Canada. Both made effective use of the Association's cards, as will be observed from an examination of the pictures.

dozen distribution points of this nature it may be taken for granted that most of the pamphlets reached their objective.

At many points these pamphlets were actually given out to the passing public by representatives of the Association. In this connection it is interesting to note that, in the experience of these officials children visitors are by no means to be neglected, particularly when they carry the little paper bags provided by so many exhibitors. Once in the bags, the pamphlets were certain to reach a home somewhere.

The general effect of the campaign, and the commentaries which were made during its operation by hundreds of interests, certainly seem to indicate that effort of this kind should not slacken. Members of the Association who collected the cards given them when the fairs were completed should take steps to have them tacked up in their factories and offices. Already this has been done in many instances, but the practice should be general wherever possible. *The Canadian public is only now commencing to realize how extensive and how excellent our manufactured articles are,—and if manufacturers fail to drive the wedge home they can only have themselves to blame. A Canadian*

trade-mark is all important if the article it covers is worthy of the name. Any system of distribution which eliminates that trade-mark is faulty. It is a known fact that Canadian goods of high quality are often sold in Canada under a foreign garb,—and this is an evil which we, as Canadians, must eradicate as quickly as possible.

In the last issue of *INDUSTRIAL CANADA* the suggestion was made that members of the Association might devote more attention to the Canadian Fall Fair. The suggestion is worthy of reiteration. Association officials visited well over a score of these institutions, choosing small as well as large ones in order to observe their value and effectiveness, and while manufacturing exhibits seen were splendid on the whole, they were not as numerous as they should have been.

Fall fair time comes but once a year, and therefore, unless some exceptional opportunity occurs, the Association, as a body, will have to wait many months before it can devise some fresh and equally attractive way in which to carry on. As individual units, however, members will have many opportunities of continuing the work started by the "Produced-in-Canada" campaign,—and

it is to be hoped that few such opportunities will be missed.

Will Grind Feldspar

The Frontenac Floor & Wall Tile Company, Limited, Kingston, are at present erecting a small plant for the purpose of grinding feldspar, primarily for their own use. They are taking this step because it is necessary for them to use only the purest feldspar in manufacturing their ceramics and, with their own grinding plant, they can determine the quality positively in the rock form, whereas in receiving it in the pulverized state they have to trust to the grinders.

This company have been making ceramic tile for over a year and have shipped them to all parts of Canada. With their own grinding plant they expect that their ceramics will be equalled by few and surpassed by none other manufactured in the world. They expect to have the plant running by December 1st. The installation can grind more spar than they can use at present so that they will endeavor to sell the surplus. The building is being made large enough to hold the necessary machinery to double the output if the demand warrants it.



Produced-in-Canada at St. John

View of the display at the St. John Exhibition of the Products of T. S. Simms & Co., Limited, which contained interesting educational features. Note again, use of Association's Cards



Another Tasty Winnipeg Exhibit

This was the display of musical instruments made by the J. J. H. McLean & Co., Limited at the Winnipeg Shoppers' Exposition during past summer.

Chairman of Prairie Division Explains Why Manufacturers Need Protection

By W. G. FRASER

Chairman, Prairie Division, Canadian Manufacturers' Association

EVER since last spring when the members of the Prairie Division of the Canadian Manufacturers' Association did me the honor of electing me chairman of the Division, I have been trying to find time to visit the membership throughout Manitoba, Saskatchewan and Alberta. However, I suppose I am no exception in being fairly busy, and what with the holiday season and the demands of my own business, it has not been possible to come sooner.

In this connection I would like to tell you a few things about the progress of the Canadian Manufacturers' Association. As you know, the Association celebrated its fiftieth birthday last June at Quebec, but it is only in the last twenty-five years that it has developed into a really useful and influential body. There are today more members of the Canadian Manufacturers' Association in the Prairie Provinces than there were in the whole Association twenty-three years ago. In 1900 there were 340 members in the Canadian Manufacturers' Association altogether; in 1921 there are 381 in Manitoba alone.

Of course many of our western members represent small industries, but it is from such small beginnings that our industries in Eastern Canada have grown to importance. Just a few figures to show the progress that is being made by manufacturers in the West.

COMPARATIVE STATEMENT OF STATISTICS OF MANUFACTURES FOR THE PROVINCES OF MANITOBA, SASKATCHEWAN AND ALBERTA FOR YEARS 1900 AND 1918.

Establishments	Capital \$	Employees No.	Salaries and Wages \$	Cost of Materials \$	Value of Products \$
1900..... 429	9,229,561	6,387	2,885,312	9,076,846	14,892,426
1918..... 4,118	206,865,352	41,847	42,135,618	177,955,273	277,475,567

The service the Association is able to give you in matters of transportation, insurance, legislation and commercial intelligence is immeasurably greater than ever before, and, if you are not taking full advantage of your membership, you are missing something of real value.

Now, gentlemen, to turn to a subject of immediate national interest. A political party has sprung up which has a definite plank in its platform "Free Trade with Great Britain in 5 years and a lower tariff all round." This issue is shortly to be decided and is a matter of most vital importance not only to Canadian manufacturers but to all classes in the country.

As a representative of the Canadian Manufacturers' Association, I must at the outset, make it clear that the C.M.A. is not a political organization in any sense. We are neither Conservative nor Liberal, but we do believe that Protection is a vitally necessary policy for Canada, not only, as many people say, for manufacturers and their employees, but for the economic welfare of the whole country.

Now I want to say to you that, like Dr. Michael Clark, I was brought up in an atmosphere of the freest of Free Trade, and a world of free trading nations seemed to me then an ideal condition. As I have grown older, however, and acquired more or less experience as we all do, I have had to acknowledge that however fine my ideal might be, it is hopelessly impractical in this day and generation. And if there is one country in the world for which it is impractical and which would suffer tremendously by its adoption, that country is Canada.

Mr. Fraser, in company with Mr. Carpenter, Secretary of the Prairie Division, has been paying a visit to the principal industrial centres of Western Canada. The accompanying article constitutes the substance of the address which he delivered at gatherings of manufacturers in each place. It is a straightforward and reasonable presentation of the case for adequate protection for Canadian manufacturing industry.

—THE EDITOR

This does not imply that I advocate protection "High as Haman's Gallows"; it does not imply even that I regard our present tariff as a model, but I do most sincerely believe that a measure of protection is the only sound economic policy for this country and I shall try to show why a policy of Free Trade would quickly and surely bring ruin and disaster to the whole economic fabric of the country.

Having made this "Confession of Faith" so to speak, suppose we are asked what the lawyers call a leading question,—WHY do Canadian manufacturers desire protection?

In the first place, I do not believe that this question of fiscal policy, of Protection vs. Free Trade—should be approached from the standpoint of manufacturers at all, but from

the standpoint of what is best in the interest of Canada as a whole. Suppose we clear the decks of a lot of loose talk which is current in many of our daily papers and agricultural weeklies, and make room in our minds for some facts which will bear the closest scrutiny. You will find for instance, in an article in the Grain Growers' Guide, of a recent issue, by a Mr. Edward Porritt, an English Free Trader who never lived in Canada, but spent over twenty years in the Eastern States, the following statement:

It all simmers down to this. What kind of a country do you want Canada to be? You have your free choice and there will not be any middle course. The free traders wish to make Canada a country of farmers, miners and lumbermen. Many of the rest of us prefer the prospect of an all round development. The farmers, it is true, are deserving of every possible assistance as the largest and most important industrial group, but also fair treatment should be given to a body of men honestly striving to build up a strong, healthy and useful industrial community, supplying the needs of a rapidly growing country, and in the course of time, we hope, helping to make Canada a country we are proud to own as citizens; proud of its achievements and believing in it as the finest country in the world in which to live.

"For forty years Parliament at Ottawa has enacted high tariffs in order to penalize Canadians who do not purchase all the manufactured goods they require from men who are in business as manufacturers in Canada."

This statement, or something like it, is one you will see almost any day in free trade newspapers and is swallowed whole by people who, if they took the trouble to examine it, would not be misled so easily.

The obvious fallacy is that the men who own or control manufacturing industries are not the only ones to benefit by home trade. You manufacturers, probably employ hundreds of men and women who provide themselves with homes in your city, become consumers themselves, pay taxes and take their own share as members of a prosperous community. You provide business for banks and railways and very likely buy many of your raw materials, directly or indirectly from the farmer. You also help swell the revenue of your city and in countless ways become an important factor in the all-round development of your province and country. The individual who owns or controls a factory certainly benefits by business he gets from Canadians who buy his goods instead of bringing in similar articles from other countries. But I submit that in the sum total much greater advantage accrues to hundreds of thousands of factory employees, and through them, to the country as an economic whole.

In the second place, Canadian industry is in its infancy. With the exception of flour milling and the manufacture of agricultural implements, there is probably not a single industry in the country that can compare in size or organization with similar and older concerns in the United States. Smaller industries mean higher overhead expense and correspondingly higher unit cost of production.

You see not only has the Canadian manufacturer a far smaller market than the American, but the geographical position of Canada makes it a far more expensive country in which to supply goods efficiently than the United States. Our population is strung across the country like a narrow ribbon nearly four thousand miles long, and interrupted by a break of 800 miles between Ontario and the Prairies, and another 500 miles between Alberta and the Pacific Coast; to say nothing of the diversity in race, habits and language between Quebec and the rest of the country. These things all add to the cost of manufacturing and distribution in Canada, and yet in spite of that increased cost, as I hope to show you a little later, the Canadian public are buying a long list of articles at prices very slightly higher than American prices for similar goods, and in many cases actually LESS.

The Free Trader may say here—"Very well, if it costs you so much more in Canada, close your factories! We will buy in the cheapest market, and only manufacture here the primary products from agriculture, mining, fishing and lumbering". What would be the immediate effect? We would have left some flour mills, saw mills and smelters. Our large cities would be depopulated, thousands of workmen compelled to seek employment in other countries and finally Canada would slowly settle down and become a purely agricultural country. The secondary effects, such as would inevitably come to our social

and educational life, would take too long to discuss.

Our Free Trader must know all this and apparently accepts the prospect without a tremor or misgiving. Suppose we face him through with a somewhat parallel case. Every one, the best agriculturists especially, abuses the farmer who grows nothing but wheat year after year. We tell him he is shortsighted and that if he will keep a little stock and milch cows he will have something in a year when the grain fails him, to fall back upon.

The Height of Folly

Now why not apply this principle to our country's development? Would it not be folly to confine the development of the country entirely to agriculture when working along broader lines we can surely build up a strong, self-reliant and well-balanced nation?

Since I have occupied the position of Chairman of the Prairie Division, a great many people have come to me full of abuse for Canadian manufacturers. I do not know whether they come after me because I am Chairman or whether it is because I pay more attention to these things since I have been more closely identified with the work. Whatever it is, it has certainly "got under my skin", especially when the charges are, as they usually are, of a most general nature and cannot be substantiated.

Similarly, abusive articles or paragraphs in some daily papers, especially in the West, are becoming far too numerous and are nearly always untrue or misleading.

Gentlemen, I feel that this situation is one for which we manufacturers are partially responsible. We have hitherto made no effort to challenge these statements. We read them and smile to ourselves. In short, we take it "lying down." We simply must make ourselves heard; common justice demands it and when statements are made in your local papers that are unjust on the face of them I cannot urge you too strongly to refute them if you have the facts, or if you have not, to promptly report it to us in Winnipeg, sending us clippings and date.

As I say, we have only ourselves to blame that these attacks are made so frequently and in such a slanderous manner. Ordinary self-respect should lead us to put up a spirited defence and I believe the public, generally speaking, will hear us in a fair manner if we are frank with them.

An Untrue Accusation

The most general of these charges is that the Canadian manufacturer is hiding behind the tariff to charge unfair prices and gouge the public. Now gentlemen, speaking for a large majority, this is absolutely untrue. I make this statement after considerable enquiry and, while I must frankly admit that there are some greedy individuals and firms who are not playing the game, the very large majority of Canadian manufacturers are honestly producing the best goods they can to supply the small market they have to reach, at prices which are based on cost of production, plus the expensive service expected from them, at a reasonable profit.

And, it must be remembered that in nine cases out of ten the manufacturer has no say in so far as the ultimate price to the consumer is concerned.

But to get down to a few facts and figures. When the Tariff Commission held its sittings throughout Western Canada in September and October, 1920, some very interesting facts were brought to light. At practically every session manufacturers making commodities on which duty applied, came before the Commission and showed that they were selling

their goods at considerably lower than the duty-paid American price for similar articles and in many cases at actually lower than the American price.

You will find in the evidence, for instance, that a binder could be bought at that time in Winnipeg for \$9.50 more than a similar machine at Fargo, N.D.; at Regina for \$7.00 less than at Williston, N.D. and at Lethbridge for \$27.00 less than at Great Falls, Mont., competitive points in each case. This does not look as though the Canadian agricultural implement people were taking any undue advantage of the Tariff, or indeed any advantage at all.

You might be further interested to hear that the Tariff Commission found that paint is sold by a manufacturer in Victoria, B.C. for less than American prices for similar paint in



W. G. Fraser

Beaver Soap Co., Limited, Winnipeg

Seattle, without considering the duty at all. I have since found that paint made in other parts of the country will stand the same test. The same applies to British Columbia canned fruits and vegetables. Another instance:—

Mr. Harvey Shaw of the North West Biscuit Company, Edmonton, submitted figures showing that his prices for biscuits were materially lower than the prices of similar biscuits at Helena, Mont.,—a competitive point, without taking any account whatever of duty or exchange.

Unfortunately, it is impossible for me here to go exhaustively into this matter of competitive prices. If I had time I could submit figures to you that I feel sure would be a surprise and a great enlightenment to the Canadian public, if they could be properly brought to their attention.

Just one other point that I cannot overlook. For some months past you have seldom picked up a newspaper or periodical, that the subject of unemployment has not been dealt with.

Handing out doles to the unemployed never corrected unemployment. In fact history shows that it was one of the greatest menaces in the past. Unemployment can only be overcome by furnishing work. Notwithstanding that during the past year and a half many Canadian citizens have been out of employment, during that time Canadians continued

to import goods, at a record pace and the goods could have been produced in our own country. Nearly three hundred million dollars worth of our total importations for the year ending March 31st, 1921, could, and should have been produced at home. If we had insisted upon goods of Canadian production instead of taking foreign products, additional wage payments amounting to hundreds of millions of dollars would have been distributed and we would hear little of unemployment in Canada to-day.

Could Supply at Home

Here are some of the articles imported during that period which could have been supplied from our own farms and factories:

ARTICLES	VALUE
Fresh and canned fruits and vegetables.....	\$11,500,376
Meats, fish, eggs and milk products.....	19,756,355
Biscuits, confectionery, etc.....	3,977,577
Leather and by-products, hides, furs and skins.....	34,939,475
Tobacco.....	14,356,294
Textiles and Manufactures thereof.....	81,366,566
Agricultural Implements.....	11,759,709
Boilers and Machinery.....	31,209,129
Castings and Hardware.....	10,852,157
Books, Paper, etc.....	11,202,755
Lumber and mfrs. of Lumber.....	12,973,670
Vehicles.....	5,955,735
Aluminum Kitchenware.....	324,992
Electric and Gas Apparatus.....	17,182,859
Asbestos.....	977,160
Salt.....	939,995
Fertilizers.....	4,272,054
Household and personal equipment.....	9,416,005
Brushes.....	1,077,718
Musical Instruments.....	3,486,744

To Achieve Nationhood

We see a lot in the papers about the nationhood our country has attained and a great deal is said to encourage Canadian national spirit. Surely a most praiseworthy and necessary thing to work for. But, gentlemen can we possibly achieve it if we depend upon Japan, Germany and the United States for the hundred and one things we are using in our every day life? Without protection for many Canadian industries, it is inevitably true that Germany and Japan, with their extremely low labor costs, and the United States with its highly developed industries, could supply our markets with cheap goods of every description and we would face the prospect of depopulated cities, Canadian industrial plants sold abroad or scrapped, factory buildings lying empty which are now providing work for hundreds of thousands of Canadian citizens, who are building homes here, raising families and helping to develop our national life along lines that would be entirely impossible in a purely agricultural community? It all simmers down to this. What kind of a country do you want Canada to be? You have your free choice and there will not be any middle course. The free traders wish to make Canada a country of farmers, miners and lumbermen. Many of the rest of us prefer the prospect of an all round development. The farmers, it is true, are deserving of every possible assistance as the largest and most important industrial group, but also fair treatment should be given to a body of men honestly striving to build up a strong, healthy and useful industrial community, supplying the needs of a rapidly growing country, and in the course of time, we hope, helping to make Canada a country we are proud to own as citizens; proud of its achievements and believing in it as the finest country in the world in which to live.



Ioco Townsite, looking North from Burrard Inlet

Ioco, British Columbia, the Picturesque Company Town of Imperial Oil, Limited

By F. M. BOYDEN

IOCO is the home of the Pacific Coast refinery of the Imperial Oil Limited, and is situated on the north shore of Burrard Inlet ten miles east of Vancouver, where the tidal waters enable large tank steamers of from 65,000 to 100,000 barrels capacity, to deliver their cargoes of Peruvian and Mexican crude oil for refining.

In the year 1914 the company commenced clearing a tract of land 33 acres in extent upon which stands the most up to date refining plant capable of producing and storing 1,000,000 barrels of oil products. It has always been a policy of the company to secure the best the employees can give, by careful consideration of their welfare, and to this end a few years ago they established the Annuities and Benefits Department, under which all employees of over one year's service are entitled to free insurance, sick benefits, etc; the scheme also embraces an old age pension.

At a conference held at Ottawa in February of this year for the consideration of industrial relations between employers of labor and their employees much time was devoted to what is known as Industrial Councils. As stated by P. F. Sinclair, who has charge of this particular department, the Imperial Oil Limited were pioneers in this matter, recognizing that if industry was to be carried on to the satisfaction of all, co-operation between employer and employee should be assured. With this in view it was essential that the question of housing the people of Ioco under the most comfortable and healthy conditions must be given earnest consideration and a subsidiary company known as the Ioco Townsite Company was formed to handle the situation. Up to this time there were 16 houses within the gates of the refinery occupied by a certain number of officials, also a club house for single men. Small shacks had sprung up along the waterfront which were not suitable or healthy as homes, owing to the lack of proper sanitation.

The Townsite Company therefore procured a tract of land twenty-two acres in extent, situated about half a mile east of the refinery and the clearing of the virgin forest was soon accomplished. Hawkins and Horie, civil engineers for the company, set to work laying out a town and sub-dividing it into lots, all of which have an area equal to 50x120 feet. Contracts were let, perfect modern sewerage has been installed on the septic system and a 6 inch water line laid to supply the town. Two fire stations with modern

equipment have been placed at the top of Second and Third Avenues, and a volunteer fire brigade of experienced fire fighters has been formed. Arrangements are well in hand for lighting the streets by electricity, and all for supplying houses with the same power for lighting and cooking etc.

The town comprises four avenues, two streets and a wide boulevard and is situated on a gentle slope from the Burrard Inlet, which with the snow capped mountains behind makes a most delightful picture from the waterfront. Lots ranging in price from \$200 to \$450 according to location have been bought by the employees and the company loaned the money for construction of houses, the home builders undertaking monthly payments over a period of 20 years, amounting with principal and interest to about \$1 per \$100 invested. In addition to this group insurance has been arranged and each householder, for a small monthly premium is covered in such a way that in the event of his death his widow receives full title to the property free from further payments. Should an employee be transferred or leave the service the company reserve the first right of purchase for thirty days.

It was found possible to construct houses at a far less cost by letting the contract for building to one firm, and the Dominion Construction Company of Vancouver were awarded the work, the contractors dealing direct with employees regarding plans and building while the Townsite Company, appointed an inspector to oversee the building operations so that each dwelling when complete would be a fit security for the money loaned.



One of the Newly Built Houses

A set of six designs were submitted^r for houses ranging in price from \$2496 to \$3550 and subsequent variations of these have been adopted, thus getting away from the severe uniformity usually so noticeable in company communities. Forty-four houses have been completed since the 10th of April of this year, and the grading of streets, lanes and construction of sidewalks completed, the latter work being done by George Woodward of Vancouver.

One of the most interesting features in connection with this undertaking has been the moving of the fifteen houses which were situated on the plant, to the townsite. Many carloads of lumber were requisitioned to build a runway and the houses were moved by a stationary donkey engine. When the fact that two hills and a clearing through the bush had to be negotiated it speaks well for those responsible that each house arrived at its new location in good order. The "Imperial Hall" a large community building 40x80 feet, with stage gallery and cloak room is a fine addition to the town and here dances, concerts, plays and public meetings will be held.

The Dominion Government have constructed a substantial deepwater wharf and float at the foot of 1st Avenue, and the Provincial Government a standard rural school for the accommodation of the 30 or 90 children of school age, with room to take care of increasing numbers as the years go on. In this building will be housed both primary and high schools. A general store and pool room will complete the building for this year, but with the coming spring further building operations will go forward, when in addition to the construction of more homes a club house for the accommodation of the single men will be erected to take the place of the one now on the plant.

There is as yet no provision for the charging of a water rate as the capital charge for the installation of this utility is carried in the cost of the lots. This and other matters of public interest will be dealt with at a later date as the new location is already a registered town and will probably soon take charge of its own affairs. Imperial Boulevard in the centre of the property is a ravine through which runs a fair sized creek, and with the aid of a little landscape gardening and a dam or two, a spot of great beauty will be added to the town which bids fair to be one of the most picturesque communities in British Columbia.

Proceedings at Annual Meeting of the Ontario Fire Prevention League

SPECIAL REPORT FOR INDUSTRIAL CANADA

THE third annual meeting of the Ontario Fire Prevention League was held in the Parliament Buildings, Toronto, on Tuesday, October 18th. In opening the meeting, the President, Mr. Arthur Hewitt, Consumers' Gas Co., Toronto, outlined the situation in part as follows:—

"Fire Prevention is making some headway notwithstanding the difficulties that surround our endeavours. These difficulties arise mostly from indifference and a lack of appreciation on the part of our citizenship of the awful condition of affairs that exists. With a per capita fire loss greater than any other civilized country in the world, Ontario has lost a million dollars a month in fire waste and yet there appears to be no "burning zeal" in effort to reduce this terrific waste.

Arouse People from Lethargy

"Sir Henry Drayton, at the recent Ottawa meeting, referred to Canada's fire loss as five times the per capita fire loss of the old land. Now this League was organized for the purpose, among other things of spreading broadcast, facts in such a manner as might be calculated to arouse people from their lethargy, to a realization that their money and their lives are in imminent danger through carelessness and indifference.

"For the first six months of this year while the fire losses for the Dominion and in fact throughout the American continent show large increases, there were in Ontario 440 fewer fires and \$280,000 less of loss than in the corresponding period during the preceding year. At the same time, the records for July, August and September of this year are not so gratifying, when we realize that there was a total loss of \$1,517,000 for the month of July, \$1,357,000 for the month of August, \$1,532,000 for the month of September, with four fires in lumber interests alone amounting to \$649,096. You see a few fires—a very few fires—have caused a tremendous proportion of the loss.

A Million a Month

"I think Mr. Grove Smith stated in speaking to us last year that out of the enormous loss that we sustained, about five per cent. of the number of fires accounted for more than half of all the loss—at any rate, a tremendous proportion of it. One fact is clearly evident, this province's fire loss averages about one million a month and I submit it is not too much to say that if reasonable and necessary provision were made in men and money through this organization, at least one half of this monthly waste would within, a comparatively short time be saved. So far our efforts have been restricted because all we can do in certain important directions is to make recommendations. We hope some day to be clothed with authority to carry forward the progressive plans set forth in the resolutions passed at a former annual convention. Everywhere today the demand is for economy in public expenditures, but is there any economy in standing idly by, while the wealth of the province is being destroyed, at the rate of a million dollars a month, when by spending a fraction of that amount on methodical and scientific treatment of the fire disease, one half of that loss or half a million dollars a month might be saved? May I plead for earnest individual effort, for

combined determination and universal co-operation in this cause of fire prevention.

"Our Secretary will present to us a very complete summary of the work accomplished by the League during the past year, so that it is not necessary for me to trespass on your time with a lot of detail, but it is very important that this work of fire prevention and the developing of a determination on the part of the people to support the efforts of the Fire Prevention League and of every Association that has for its object the lessening of fire waste, should be very carefully considered and planned for. It does seem to me as if you can arouse enthusiasm in anything else under the sun more easily than you can in regard to fire prevention, and yet look at its importance. Look at the measure we will take to save a human life and look at the number that have been sacrificed by this awful fire menace and the loss in money during times when money is scarce and hard to get, and yet we hesitate about spending a few shillings or dollars in order to effect or have a reasonable chance of effecting an enormous saving in this fire waste. It seems to me, that it is a disgrace—it is a disgrace to all of us. It is a disgrace to us present as a whole, it is a disgrace to everybody concerned that greater effort is not put forth and that greater interest is not manifested in regard to these matters. But, it seems to me the time will come, it will be forced upon us, when bare economies will make it necessary for us to see that something is done to effectually check and lessen this terrible waste.

Fire Marshall's Office

"In our meeting this morning we have three representatives of the Board of Trade and we have representatives of the Canadian Manufacturers' Association. I might remind you that they are the creators of the Fire Marshall's office and indirectly the cause of the bringing into being of this League. The spirit of it in its initiatory period was in the Toronto Board of Trade, the Ontario Associated Boards of Trade and the Canadian Manufacturers' Association, and in my humble judgment, the object of the creation of the Fire Marshall's office was primarily Fire Prevention. Whether it has become secondary or not in that Department I am not prepared to say, but it does seem to me that nothing is more important in connection with the Fire Marshall's office and with this League, than Fire Prevention.

"I don't think it would be out of place in me to remark in passing, not with any reflection on anybody concerned, that this Fire Marshall's office was created and provision was made for its maintenance by the taxing of insurance companies upon their premiums, and practically every dollar that is required for the work of fire investigation and prevention is provided out of that fund. Just the proportion in which fire prevention should be considered primary and which secondary, I am not offering an opinion at this time. I have read to you the Fire Marshall's letter. I do not think he is familiar with the means that were taken when the Ontario Fire Marshall's office was created and developed and I am not at all sure, and I don't think you are at all sure, that fire prevention is *not* the primary object of the organization. However, the Fire Marshall has expressed his understanding in the letter

and I have read it in your hearing, just exactly as he has written it."

Heavy Fire Loss Can Be Averted

That a great deal can be accomplished by adequate fire prevention methods was emphasized by Mr. T. Alfred Fleming, Chairman of the Committee on Conservation of the National Board of Fire Underwriters, and also chairman of the Fire Prevention Day Committee, N.F.P.A., who, in dealing with the situation in Canada and the United States, pointed out that for each day of the past year the preventible fire losses in the two countries had run around \$1,500,000. So far as he was concerned, Mr. Fleming contended that there was not a single class of fire which could not be prevented, if a proper study were made of conditions, and he regretted that so little attention was being paid to the prevention of this great loss, both in property and lives. In the two countries, he pointed out, there were 15,000 lives lost last year through fires, and there were some 17,000 other people who had become public charities through other fires, the bulk of which humanity might have been saved through care.

Children Suffer

The most regrettable feature of this loss of human life was that fully 82 per cent. of the lives lost were those of mothers and children, which seemed to tell him that in the homes and schools, where the women and the children live, there was the least attention paid to the great scourge of the nations. While the property losses might be bad enough, the loss of women and children was a hundred times more serious, and yet, Mr. Fleming felt, the ordinary man at the head of a household paid but little attention to the welfare of his family. As an example, he declared that not one man in 200 ever got the family around the table to give them a lecture on fire prevention; not one child in a hundred would know just what to do to get the fire brigade should there be a fire in the home, and few women were at all trained in fighting incipient fires in the homes. The business man, he declared, might hold weighty consultations among his staff on the best way to combat and prevent fires in the factory or the business establishment; then, when he went home at night he would leave the protection of his family to chance.

Then when it came down to the schools, Mr. Fleming in his tours about the country had found some lamentable conditions. There were schools, he declared, which thought that the outside fire-escape was all that is necessary, but he could not see it that way. Too often in the past these fire escapes had proved to be nothing but death traps, while hundreds of children had lost their lives on this continent through inadequate protection. The only safe fire escape in any school, he declared, was the fire-proof and smoke-proof tower, a place in which the children could be escorted to safety, no matter how serious might be the fires about them. But here again, he asserted, he had run up against obstacles in his propaganda. He had encountered many architects who, though they were in charge of the construction of public schools, did not seem to have the least idea how they should be built to guarantee the safety of the children. He had also met

many business men who had no sane idea about the methods of protecting lives in factories, though they might be capable business men in other respects.

Homes in Danger

Going into the homes, Mr. Fleming found there some fine fire traps which the ordinary public seem to know nothing about. One of them which he named in particular was the electric iron, which he stated, from his statistics, had caused 42 per cent. of the home fires in the United States in one year. He recognized that in making such a statement he was apt to get into conflict with the electrical manufacturers, but he was quite ready to continue the war so long as they saw fit. Then another home trap was the dustless mop, than which there was, in his opinion, no better agent for its production of fires in the homes. It was in the line of the spontaneous combustion agencies, so his advice was that it should always be kept in a galvanized can. Another big menace in the home was gasoline, and he declared that in a gallon of gasoline there was more destructive energy bottled up than there was in the bomb which recently created such destruction on Wall Street in New York.

As to the whole fire losses, he declared that fully 87 per cent. were caused by carelessness; and as to the economic loss, he believed it to be beyond measure. As an illustration, there was a recent fire in Ohio where some 175 workers were suddenly thrust out of their jobs simply because one man broke the non-smoking rule. Those workers were specially trained in one line, they were 25 or 35-year-old employees, and when the fire was over they were given the option of going without work or moving into another state, bag and baggage, and getting ready to work

at the end of a year. So the economic loss from that fire was beyond measuring, and he felt that the same thing would apply to practically all the big fires in this country.

A number of resolutions were adopted during the day. Among them were: An endorsement of the activities of the Dominion Association of Fire Chiefs and the Ontario Federation of Fire Fighters; the advocacy of a universal telephone number for all fire stations all over Canada; the appointment of a committee to investigate the various kinds of roofings, with a view to determining which were suitable as fire preventions; the endorsement of the appointment of a commission to investigate grain transportation with a view of eliminating dust explosions; the suggestion that the manufacturers of matches, cigarettes and tobaccos should be placed under a moral obligation to warn the purchasers of their products of the dangers which are apt to come from their use; and an appeal to the Government to enlarge the scope of the Fire Marshal's Department, with a view to increasing fire preventive activities.

Officers Elected

Following were the officers elected:—

Honorary president, Hon. E. C. Drury; president, Arthur Hewitt, Toronto; vice-presidents, J. M. Watt, London, G. C. Martin, Hamilton; director, class of 1923, J. J. Stewart, Brampton; directors, class 1924, John B. Laidlaw, Toronto; F. L. Mason, Oshawa; for members of the Legislation Committees, H. H. Dewart, K.C., M.P.P., Toronto, Hon. George S. Henry, Todmorden, Rev. Edgar Watson, Fenelon Falls; members of the Nominating Committee, Russell T. Kelley Hamilton; John E. Keyes, Galt, George F. Lewis, Toronto.

Credit and Fire Insurance*

The Backbone and Mainspring of Trade and Commerce taken advantage of by Thieves and Fire Bugs.

By GEORGE F. LEWIS

Deputy Fire Marshall of Ontario

"CREDIT" is the foundation on which the trade and commerce of the world is built and "Fire Insurance" is the keystone, the essential element, which completes the structure, locks its members together, and makes it safe and permanent.

Millions are loaned on the stroke of a pen almost every day in the year. The merchandise which enters into the transaction may be a thousand miles, or more, away, but the deal is made safe by another stroke of the pen and a fire insurance policy comes into being.

Credit as an asset is worth all the yellow gold of the mines to the man who has earned it and means to retain it. In establishing his credit he gains the coin current minted from character.

Not only is credit a priceless asset to the man in commercial life, but to the professional man, the clerk and the mechanic its value has long been proven. It is estimated that 97% of the world's trade and commerce is transacted on credit.

To make those enormous transactions possible it is necessary that the commodities of "Credit" and "Fire Insurance" be cheap. They are cheap,—possibly the cheapest things in the commercial world today.

I will go farther and say that they are too cheap—they are too easily obtained by certain unworthy classes of the community. As these main arteries are necessary in the legitimate transactions of trade and commerce so also are they taken advantage of in the illegitimate transactions of deception and fraud by the criminal classes in our community. We continuously hear complaints from all sections of mercantile life of dishonest methods resorted to by a section of the foreign population in business dealings. They have it down to a fine art, and apparently are able to obtain almost unlimited credit and unlimited fire insurance with ease and facility.

Sometimes it almost seems as though the tricky and fraudulent foreigner was given preference in this nefarious work; but I think the real facts are that they resort to all kinds of deceptive and underhand means to obtain their object. Two or three of many such cases that have come to our attention may be illuminating:

Two Jews invested \$300 each, in a ready-to-wear business. They had three bank accounts. They got lines of credit from each bank. They got credit from wholesale firms amounting to \$6,000. They got private accommodation amounting to over \$1,000. They got fire insurance amounting to \$9,000., on a stock never valued at more than \$4,000, according to their own estimate. They took in a third partner with \$1,800

worth of stock, on which there was a liability of \$1,000. and on which he had a cover of \$5,500 fire insurance.

They couldn't or wouldn't pay their debts. It was evidently a case of fire or failure. The "plant" was made and a fire occurred. But the fire wasn't a success. There happened to be another Jew manufacturer on the floor above, whose insurance had been recently cancelled and he proved to be, not only an excellent fire preventionist, but also a good fire alarm. He wasn't orthodox or he wouldn't have been at his factory at the time, or else he suspected that something was going to happen; consequently he called in a passing fireman, as soon as he smelled smoke, and the fire was quenched at its incipency without much damage.

At the time of the fire the value of stock was between \$3,000 and \$4,000, with insurance thereon amounting to \$14,500.

What the amount of claim would have been on stock if everything had been completely burnt up, is problematical—but you can form a fair estimate.

At the time of the fire there was an overdraft at Bank No. 1 of \$1,900 and Bank No. 2 account was overdrawn to the extent of \$700.—debts amounted in all to over \$5,000.

This is the abridged history of a manufacturing concern, in business for fourteen months, with which our highly-taxed, decent, respectable Canadian manufacturer must compete. I ask you, it is fair?

Another similar concern had an unsuccessful fire recently and in this case the stock was valued at \$4,000 and they had a cover of \$15,000 fire insurance.

Some months ago, I was advised that a resident of one of our northern towns wanted to go home to Italy; that the first windy night his dwelling would be burnt. I found out the names of the companies that were on the risk and the insurance was promptly cancelled.

New and additional insurance was, however, placed on the premises, about which I knew nothing, and sure enough within one month the dwelling was burned to the ground,—a total loss. The usual alibi was set up, "the owner was away from home at the time of the fire". He got his money and went home to live in sunny Italy, a rich man.

I have known a man get \$3,500 insurance on a stock not worth \$500. It took just three days for the Company to cancel it—but he got other insurance and within a couple of months there was nothing left but charred embers of his stock and fixtures from a fire that blew the front out of the store about twelve one dark night; but did not spread outside the one room.

The chief transgressor that we have to deal with are among the criminal classes of the Jewish and Italian races. It is they who prey upon our liberal systems of credits and fire insurance.

The breed of thieves and crooks will last while the race lasts, and some of them will continue to be well introduced. They will come to you of forceful personality, of correct poise, slickly veneered, immaculately groomed. They will throw you bouquets hoping to find you easy. They will mix bland, determined importunity with a veiled measure of threat, suggesting that you are behind the times unless you write the full line they demand. You are no doubt accustomed to meet these men, and will not be hurried or sandbagged into making an ill-considered cover. You cannot keep a vigilant detective and a bright lawyer on guard to watch your risk over night. Consequently you cannot afford to gamble upon character in the insurance risk; every effort should be made to know in advance.

Selfish greed animates the acts of an incendiary. He may not intend to commit

* Portion of address delivered before Ontario Fire Insurance Agents' Association, Hamilton, October 19, 1921.

murder, but he cares not nor yet thinks of the possibility of sacrificing human lives or the horrors of conflagration in committing his dastardly act. This desperate individual cannot control the ravages of fire once he has touched the match. Laws must therefore be enacted to make life and property safe.

With the development of the internal combustion engine and the general use of automobiles, laws had to be enacted controlling the man who guides the motor car; making him responsible for the life which rides with him and that which may cross his track.

Section 515 of the Criminal Code provides penalties for those causing fire which results in loss of life or property; and who refuse to make alterations, remove materials or supply apparatus when ordered to do so by the proper authorities.

Thus, we are also making progress in our fire prevention laws, but we are only starting.

Fires in the Province

In 1920 the cost of maintaining the Ontario ash heap amounted to \$11,771,718—divided among 9,296 fires. A per capita loss of \$4.70.

During the last five years there have been 48,312 fires in this province consuming \$64,844,935 worth of merchandise, buildings and foodstuffs, averaging one fire every hour of the day and night, and a daily loss amounting to \$35,500.

In this day of advanced civilization it is appalling to think of this awful destruction of our substance which is gradually but nevertheless effectively impoverishing our people.

Our fire losses in Canada, on a per capita basis, are ten times greater than the average of the five principal European countries in normal times.

The insurance premiums in Canada are approximately five times more than the English rates; and our fire waste is about five times as great on a per capita basis.

For the last three years the fire losses in the Dominion have averaged twenty-seven million dollars a year.

A Continuous Drain

We cannot endure indefinitely the steady, continuous drain of one million dollars a month, fire waste, in Ontario. Something must be done to stop this sapping of our commercial strength and vitality.

The cure of this national disease is largely in your hands. If you fail in your diagnosis and administer the wrong potion, the disease will spread further, necessitating the administration of a stronger and more noxious dose by someone else.

This is your business—if you wish to retain it. Build your own house and set it in order. Don't let it be mused by outsiders.

I doubt if any person will controvert me when I say, that if all suspicious individuals in the two classes that I have mentioned were absolutely refused fire insurance, and all others of the same classification were held down to a strict 50% cover, there would practically be no arson; and many other fires which do not bear the recognizable imprint of incendiarism would not occur.

Purely accidental fires are few in number and are not the cause of this serious fire tax on the people.

Is it reasonable? Is it right to expect honest, hard-working Canadians who have to supply the money to pay these fire fiends' losses to keep on doing it? There is bound to be reaction if the scum of European countries can come over to Canada and, by flim-flaming the people, collect in a few months

enough money for them to go back home and live for the balance of their natural lives in opulence.

Over-Insurance

The first and most important phase of this problem for your organization to consider and for the individual members to carry out is to see that property—buildings and contents—are not over-insured.

Over-insurance is a great temptation to a person to be careless and indifferent with regard to hazard from fire, no matter how honest he may be. It breeds bad house-keeping methods, accumulations of litter, rubbish and general disorder.

If business is bad it is a further temptation to sell out to the insurance companies. With the criminal class, the arson gang, the pyro-maniac, or those who are hopelessly involved in debt it is an invitation to have a fire.

Inventory and Inspection

Agents should make a careful inventory and see that substantial values are behind every cover, and, with the exception of rapidly fluctuating lines of business, further concurrent insurance should not be permitted without written consent.

If men were not allowed to over-insure their stocks or buildings and carried a portion of the risk themselves they would be more careful to take adequate precautions to prevent fires. There are too many people fanning themselves with their exemption papers.

Inspection

Rigid inspection is equally important. An honest man will do everything within reason to safeguard his business, his home, and his lives of his family from destruction by fire. A suggestion is usually all that is necessary. In his report of the Ontario Insurance Commission, Hon. Mr. Justice Masten states:—

"It appeared from the testimony given before me that more than 60% of the total premiums collected by Boiler Insurance Companies is expended in Inspection and Engineering charges, and that the actual loss ratio of all these companies for the last ten years, is not more than 7% of the premium. These examples indicate to my mind that efforts toward Fire Prevention can most effectively be made by periodical inspection of risks by independent and competent inspectors."

I think you should do everything in your power to control the business of fire insurance by restricting it and elevating it as a profession of specialists. Cut out the irresponsible fly-by-nights—the junk dealer—and those who are using it as a side-line. Some of the most flagrant cases of over-insurance, where fraud has been perpetrated or attempted, have made possible by a certain life insurance agent who sells fire insurance as a side issue.

Ben H. Morgan's Comments on Canadian Trip

The *London Times* interviewed Mr. Ben H. Morgan, chairman of the Council of the British Empire Producers' Organization, on his return to England from Canada.

"Mr. Morgan," states the *Times*, "has been successful in making direct marketing arrangements in connection with grain, farm produce, fish, lumber, and many other Canadian products which were formerly handled through United States brokers and financed in New York. A large number of Canadian organizations dealing with these products have decided to affiliate with the British Empire Producers' Organization, which will

act for them in London in an advisory capacity.

"Discussing the outlook for increased exports from the United Kingdom to Canada with a representative of the *Times*, Mr. Morgan said that the present position was extraordinary. In spite of the fact that there had never been a more favourable opportunity for pushing the sale of British goods in Canada practically nothing was being done in this direction.

"Canada imported \$600,000,000 (£120,000,000 at normal exchange) worth of goods from the United States last year, which she would have preferred to buy from Britain if she had had an opportunity of doing so. Purchases were made from the United States primarily because British firms would not go after the business, and would not organize on lines to suit the conditions of trade in Canada. British goods were not actually available in Canada as and when they were required and in small parcels.

"Trade was being done in a hand-to-mouth fashion going to unstable markets, depressed financial conditions, and difficulties in regard to exchange. The buyer in Canada regarded the United States as a great warehouse. He could post a small order for supplies to the United States, and in a few days the goods would be delivered at his door. In most of the populous centres he could telephone his orders and get deliveries by express within 48 or even 24 hours. The British manufacturer and trader had never realized what these conditions implied. They would never succeed in the Canadian market until they carried stocks over there and gave quick deliveries in small or large parcels.

"Having ascertained the market's requirements, British manufacturers would be well advised to send stocks to Canada either to distributing stations of their own or to bonded warehouses or on consignment to reliable firms. This had now been made comparatively easy by the extension of the export credits scheme to cover shipments to Canada, since the financing problem was thereby solved.

"If the position was carefully examined by manufacturers and exporters from the standpoint just indicated, continued Mr. Morgan, he was sure that a large increase in British trade with Canada would follow. In his opinion it was in connection with the development of the Dominions and Colonies that we must look for relief from the unemployment now prevailing in this country. If the Canadian market was tackled energetically we could in a very short time increase our exports to that Dominion by at least £50,000,000 per annum.

"Canada was determined to maintain and increase her position as a manufacturing country, and it was very disquieting to notice the tremendous influx of American capital in her manufacturing industries. Last year in Toronto alone 28 new American factories were begun and only two British.

"During and since the war, added Mr. Morgan, there had been quite an extraordinary manufacturing development in Canada, which had been fostered in a very able manner by the Canadian Manufacturers Association. Canadian firms were going to make a strong bid for Empire trade, particularly in those products which were now being supplied by the United States. Canada rightly felt that she could and should send her surplus products to British markets where favourable shipping and business conditions existed. In this connection arrangements have been made for the British Empire Producers' Organization to supply Canadian manufacturers with information concerning openings for Empire trade and shipping, financial and general market conditions."

The Origin and Development of the Steel Tank for Industrial Purposes

By C. H. SCHEMAN

Illustrations by courtesy of Structural Steel Association

THE history of all building shows continual progress in the selection of more permanent materials and methods of construction. The tree homes of early races were replaced by homes hollowed out of living stone, the mud caulking of the log cabin was superseded by lath and plaster, and within our own day the greater use of steel has made skyscrapers, bridges and many types of machinery possible and profitable.

The old wooden tub, the water "tank" of our fathers' boyhood, can yet be recalled by many of us. Indeed, this relic of cruder times is still with us, serving here and there as a temporary expedient against the inevitable day when it is to be permanently replaced by a modern steel structure.

Until the early nineties the steel tank was a flat-bottom imitation of the wooden tank. Then came the modern hemispherical-bottom tank, and the story of its invention can be nothing but a striking tribute to the inventor, the late Horace E. Horton, a well known American engineer. This tank was a daring departure from the then strongly established practice, and is discussed in a memoir of Mr. Horton published in volume LXXXVI of the Transactions of the American Society of Civil Engineers.

In 1894 he (Mr. Horton), brought out two essential elements which made the steel tank commercial. They were the hemispherical-bottom tanks supported on steel columns and the connecting of the columns directly to the sides of the tank.

Prior to this, though the steel tank on steel columns had been used quite extensively, its general adoption had been prevented by the expense incident to the method of construction. The tanks had generally been flat-bottomed, supported on the columns by heavy floor beams and closely spaced joists, though there had been some instances of tanks with conical bottoms, and also with

segmental bottoms, both these forms necessitating materially more metal, as well as more expensive shop-work, than did the full hemispherical bottom produced by Mr. Horton. The method he adopted, too, for dishing these bottom plates was novel and inexpensive. The result of these improvements has been the general adoption of this form of elevated tank, and examples thereof are to be found in all portions of America, and the world generally.

As this hemispherical-bottom tank, and later on the elliptical-bottom, have been generally adopted in many industries it will be of interest to review briefly some of the uses of the modern steel water tank.

Municipalities were the first to adopt this tank, and the original installation at Fort Dodge, Iowa, in the early nineties is still standing and in good condition, apparently able to live out the three score and ten years which are generally attributed to this type of tank. This invention made the elevated tank, with its usually less cost of storage per gallon, valuable to cities which had been for some years unsuccessfully experimenting with tall, slender steel standpipes which were in most cases of doubtful economy. The fact that over 4000 municipal tanks have been built seems pretty conclusive evidence that this new type of tank is much appreciated by cities and towns in Canada and the United States.

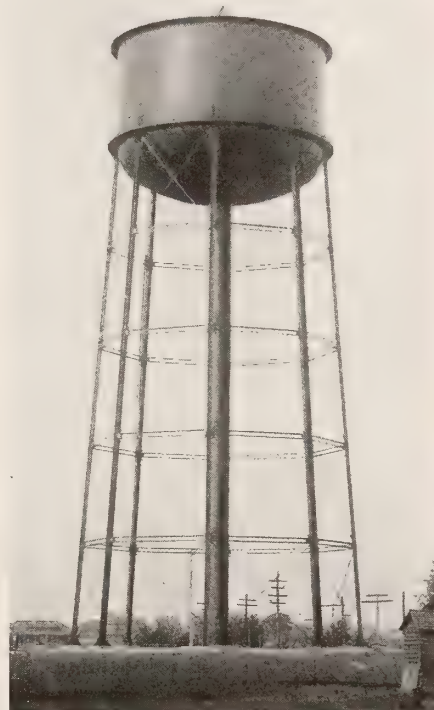
Railroad companies were quick to realize the advantages of the hemispherical bottom tank on account of its economy of metal over the flat-bottom steel tank, supported on a

steel tower, and the much greater degree of safety and length of life over the wooden tank. The graceful and pleasing appearance of the new type was also an asset that was not overlooked.

The elliptical-bottom tank was invented by Mr. George T. Horton, the son of the inventor of the hemispherical-bottom tank. The bottom of this tank has an elliptical cross-section and is of such shape that it acts as a diaphragm in taking up expansion and contraction in the steel riser pipe, which is riveted directly to the bottom. This feature, which is patented, is an important one, for it eliminates the necessity of an expansion joint at the point of connection of bottom and riser. The riser thus acts as an additional column, and supports a part of the weight of the shell and contents. This type is also built of large diameter in comparison with the height, thus reducing the variation in pressure due to the difference in head of water between the bottom and the top of the tank proper.



Example of Conical-bottom Tank in use principally in railroad operation.



Example of Municipal Water Tank, this one in use in Stratford, Ont.



Combination Tanks, one for water supply, the other for sprinkler system.

Later on came the improved conical-bottom tank for railroad service, permitting easy deposit of sediment in the riser pipe, which acts as a sedimentation basin, the inlet and outlet pipes extending for the purpose above the bottom of the riser. This sedimentation feature is also incorporated in the hemispherical and elliptical-bottom tanks.

Canadians have been unusually interested in one feature of this steel tank construction, namely; the large diameter riser of sufficient size to prevent freezing of the water in the winter. The riser is enlarged to a diameter of four or six feet to provide a column of water of sufficient thickness to make solid freezing impossible except in the extremely cold climates and where there is no circulation of the water. The inlet and outlet pipes through which the tank is filled and discharged are thus "buried" in a column of water, not at all a bad insulating material. A special railroad tank in which the water is heated by a stove has also been developed.

Industrial plants utilize the elevated tanks for sprinkler system supply and for general factory service water supply. Perhaps the most striking of the many adaptations of these tanks to many commercial purposes has been the construction of novelty tanks in which utility is combined with high advertising value. The milk bottle tank is a striking presentation of the product of the City Dairy Company of Toronto. It does not hold milk, however, but just the water necessary for fire protection in connection with the sprinkler system. Tanks have also been built to closely duplicate beer bottles, cocoa cans and flour sacks.

Many other forms of tanks exist and serve many industries. The digester, for instance, is used in the manufacture of paper pulp. Acid tanks hold the acid used in many industrial processes. The agitator serves in separating elements of different liquids treated in oil refining processes, cyanide processes of extracting gold and in other industries. The steel smoke stack serves everywhere. The flat-bottom storage tank, sometimes holding several million gallons, provides water supply for cities, oil storage capacity for petroleum producers and refiners, fuel storage for railroads and manufacturing plants, and molasses storage for the sugar industry. Surge tanks are often indispensable at hydro-electric plants, wash water tanks are necessary in municipal water purification plants, steel bins serve in coal and ore handling, and a steel barge is just a special type of tank with the water on the outside instead of the inside.

It is a far cry from the wooden tub to the modern leak-proof, rot-proof and fire-proof steel tank, but the latter is now firmly established as a result of the manufacturing processes developed.

A Social Club

E. L. Drewry, Ltd., Winnipeg, have recently organized a new department known as the Drewry Social Club. They have reconstructed an entertainment hall, 50x175 feet, this being specially adapted to dances, whist drives and musical evenings. 200 couples can be comfortably accommodated. Meetings are held on Thursday and Saturday evenings, Saturday being open night. Membership is now over 100. A twelve-piece orchestra has been formed, composed of employees, and they are showing great talent. The company are greatly pleased with the new departure, believing that from the standpoint of general efficiency and friendly relations, it is one of the best moves they have ever made.

To Develop Manufacture of Clay Products

A course of ceramics is being included in the chemistry and physics department of the Saskatchewan University under an agreement entered into between the Bureau of Labour and Industries and the University Board of Governors, according to an announcement recently made by Hon. C. A. Dunning, Minister in Charge of the Bureau. The Public Service Monthly of Saskatchewan gives the following information about this new departure.

President Murray has been successful in securing one of the very best men available for the work in the person of W. G. Worcester, a ceramic engineer, who has had wide experience not only in the tuition of ceramics but in field work among clays and in the designing and construction of plants for the manufacture of brick, tile and other clay products.

The announcement is one of considerable importance, indicating that the Bureau of Labour and Industries has taken another step forward in an effort to render available to commercial enterprise some of the valuable and extensive clay deposits in this province.

"It is sound business theory that the resources of a country can be successfully developed only as men of practical and scientific training are available to the men

with capital willing to undertake development," said Hon. Mr. Dunning. "Consequently we have made an arrangement with the Board of Governors of the University to include a course of ceramics in their chemistry and physics department during the present term. Dr. Murray has been successful in obtaining a man exceptionally well qualified for the work, and by a special arrangement a considerable portion of the time of this ceramic engineer will be available for field work and research under direction of the Bureau of Labour and Industries.

"When one considers that in Saskatchewan alone brick and tile buildings to the value of \$8,379,774 were erected during 1920, and that only \$30,000 worth of the brick and tile was manufactured locally, this despite the fact that we have such large and valuable deposits of clays, anyone must be convinced that this particular resource is in need of study and development.

"It is not generally known that such articles as jampots, milk jugs, bean jars, mixing bowls and other lines of crockery are now being made of Saskatchewan clays, and are finding a ready market in Eastern Canada. The raw clay is mined in this province and shipped out for manufacture. If such products can be marketed successfully as far east as Montreal, then it is reasonable to expect that a local concern properly organized and with adequate capital might in a few years secure a fair proportion of the market of at least Western Canada. This particular market alone is well worth cultivating. In 1920 Western Canada used well over \$28,000,000 worth of clay products in addition to its share of \$4,000,000 worth of crockery imported into Canada from the States.

"With such facts as these," said Mr. Dunning, "we feel the department would fail in its duty were we not to devote some special effort toward the assistance of those clay plants already in existence, as well as the development on a broader scale of such a valuable resource. Why should we be importing building materials at great expense when the very best of such materials are undeveloped at our very doors?"

More Briquettes

Steps are now being taken toward the establishment of a coal briquetting industry in the Edmonton district and possibly in other parts of Alberta as well. Estimates are being obtained on the cost of necessary machinery for an initial plant and, when approved by the advisory council of scientific research, will be submitted to the provincial government with a view to inclusion in the money votes for the next session of the legislature. It is expected that tar from the Athabasca bituminous sands will be used as a binder. Experimental work on the latter is now being conducted by the government's tar sand expert, E. Stanfield. Slack, low grade and disintegrating coal will be utilized.

Ross H. McMaster, Vice-President and General Manager, Steel Co. of Canada, Limited, who recently returned from a trip to Western Canada, reports that from what he saw there is no indication of any immediate resumption of industrial activity, at least not until present crops had been turned into cash. Prospects had been excellent but the decline in the price of wheat had disheartened the grain growers.



Example of Novelty Tank, combining utility with advertising value.

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

Executive Council Meets at Montreal

The Executive Committee and the Executive Council held their regular meetings for October at the Windsor Hotel, Montreal, on October 27. Those present at the meeting of council were,—the president, W. S. Fisher, St. John; vice-presidents, John R. Shaw, Woodstock and C. Howard Smith, Montreal; George Brigden, W. C. Coulter, Sam Harris, L. L. McMurray and J. P. Murray, Toronto; R. W. Leonard, St. Catharines; J. M. Taylor, Guelph; J. H. Baetz, Kitchener; J. H. Fortier and J. E. Warrington, Quebec; J. Beaubien, B. W. Coghlin, W. A. Desbarats, A. O. Dawson, T. P. Howard, Art. Harries, P. E. Joubert, A. Neighorn, S. F. Rutherford, J. H. Sherrard and Fred Whittall, Montreal. Reports were received from all the standing committees and, after consideration, were adopted.

Commercial Intelligence Committee's Work

Reporting to the October meeting of the Executive Council, the Commercial Intelligence Committee stated that the Committee had met in Toronto on October 25 and had received a full report of the routine and special work of the Department, covering the period since the last meeting, including the supplying of many sorts of statistical information and lists of manufacturers to members, Government Departments, export and import merchants, the preparation of articles for various publications on Canadian trade subjects, the intensive development of the Made-in-Canada idea among large consumers, several memoranda and recommendations to the Executive Committee, and the proposed development of export clubs in Vancouver, London, Windsor, Hamilton and Montreal.

The committee reported as follows with regard to co-operation with the Canadian Red Cross Society—"It is anticipated by the Red Cross Society that they will be called upon to take hold of emergency situations such as fires, floods or other disasters of a serious nature as they may occur in Canada. The Red Cross Society desires to know where various supplies are available for purchase by them in emergencies and your Committee recommends that the Department draft a suitable letter to interested members to gather what information the individual manufacturers may desire to give."

On the subject of a Made-in-Canada train for France—"Your Committee considered the information supplied regarding this project. It was felt that it would be worse than useless to advocate the sending of an Exhibit Train unless it is fully representative of all classes of industry in Canada. Definite and real interest on the part of a large number of individual manufacturers would seem to be

necessary to ensure a successful exhibit. Your Committee recommends that the Council discuss the desirability or otherwise of sending a descriptive circular to the members calling for reply as to their interest and probability of taking space."

Membership Grows in Spite of Losses

Owing to the comprehensive plans of the Membership Committee, it is possible to report a net gain in membership of the Association for the first six months of the current fiscal year in spite of the trade depression which has caused a number of firms to cease operations, and also in spite of the increase in fees authorized at the last annual meeting. The results for the first six months are as follows by Divisions:—

Division	Applications Accepted	Resignations Accepted	Gain or Loss
Ontario.....	104	98	+ 6
Quebec.....	24	40	- 16
Prairie.....	53	26	+ 27
British Columbia.....	23	14	+ 9
Maritime.....	10	15	- 5
	214	193	+ 21

The reasons for resignations are classified as follows:—

Out of business.....	87
Struck off for non-payment of fees.....	39
Amalgamations.....	1
No reasons given.....	52

193
It will thus be seen that in the first three classifications; namely, out of business, non-payment of fees and amalgamations, amounting to 141, it was impossible to retain those memberships. On the other hand, it is gratifying to report that during the six months, 214 new members have been brought into the Association.

Review of Unemployment Situation

Reporting to the October meeting of the Executive Council, the Industrial Relations Committee supplied the following information on the unemployment situation:—

"Your Committee in the early summer went on record as holding the view that the question of unemployment could be dealt with most effectively by the various local authorities, urban and rural, throughout the country. Accordingly your Committee approved of the policy laid down in July by the Federal Department of Labour to the effect that the responsibility for meeting any unemployment situation that might arise lay, in the first place, upon the municipal authorities; in the second place, upon the provincial authorities. At the time this policy was laid

down, the Dominion Department of Labour suggested to the various provinces that after a thorough survey had been made by each of the provinces, it might be advantageous for representatives of all the provinces to meet with representatives of the Dominion to discuss the problem as it affects the whole country and devise some general plan of assistance to the municipalities. Only three of the provincial governments have so far signified their approval of the suggestion of a national conference. In view of the fact that only three of the provinces have fallen in with the suggestion and in view of the expense and doubtful value of such a conference, the Dominion Government has abandoned the idea and has laid down the following principles as regards unemployment—

"1. Unemployment relief always has been and must necessarily continue to be, primarily, a municipal responsibility, and in the second instance the responsibility of the Province.

"2. That because of the present situation being due to causes beyond the power of local or even national control, Provincial and Federal Governments should co-operate with municipal authorities in:

"(a) helping to create and provide employment,

"(b) Where employment cannot be furnished to workmen who are willing to work, to aid in providing food and shelter for themselves and dependents until the present emergency period is past.

"3. That Federal funds used for unemployment relief or for relief work must be disbursed only through responsible municipal authorities, who in each case shall bear at least one-third of the total or extra cost.

"With regard to the cost of work undertaken by municipalities in order to relieve unemployment, the Dominion Government have adopted the following principles:—

"(a) Municipality to bear the normal cost, that is to say, the cost of carrying on the said work in the normal working season.

"(b) Estimate of normal cost to be approved by Federal Government's engineers in the Department of Public Works.

"(c) That Municipal, Provincial and Federal Governments bear equally and jointly the actual cost over the estimated normal cost, thereby encouraging the creation of employment where possible.

"(d) That where work cannot be provided, the Federal Government continue to refund one-third of the disbursements actually made by a municipality for unemployment relief, conditional upon the Provinces participating on an equal basis.

"Your Committee beg to report that it has no criticism to offer of the above-mentioned principles laid down by the Federal

Government as they seem to your Committee to be thoroughly sound.

"In connection with the action taken by the Ontario Government in the matter of unemployment, your Committee beg to report that a Committee of 8, as suggested by the Premier and representing 8 different interests, namely, manufacturers, wholesalers, retailers, labour, farmers, returned soldiers, the building industry and financial interests, laid down seven propositions to the general effect that prices should now be based on cost of replacement. The Ontario Division then inquired by questionnaire whether members had adopted the practise of so basing their prices with the result that a practically unanimous affirmative reply was received. When this result was reported to the Premier he expressed great surprise and great satisfaction and made it the occasion of pointing out to his Minister of Labour how remiss, in comparison with the manufacturers, labour had been, in that nothing had been done to secure from the rank and file of organized labour approval of the proposition laid down by the Committee of 8 to the effect that "Labour should agree to take a reduction in wages proportionate to progressive decrease in cost of living". Notwithstanding the failure of labour in this regard it is intended to proceed with the original idea of giving wide publicity to the seven propositions laid down—all of which, with the exception of that of relating to labour, have been approved by the bodies concerned—in the hope that the public might, in this way, be induced to resume buying."

New Members Added to Executive Committee

Two vacancies on the Executive Committee were filled at the Montreal meeting. The vacancies were created by the resignation of H. H. Champ, Hamilton, who had found it impossible to act, and by the transference of the membership of C. Howard Smith, Montreal, from the elective to the ex-officio class. The new members are Arthur White, the George White & Sons, Co., Limited, London, who is also vice-chairman of the Ontario Division and T. P. Howard, Howard Smith Paper Mills, Limited, Montreal, whose experience in the presidency two years ago fits him admirably for the position.

Recent Publications and Bulletins

329. October 25, 1921—Circular letter to the membership, issued by the Tariff Committee, advising that amended invoice forms are to be used for importations into Canada and explaining nature of changes.

331. October 28, 1921—Circular letter to the membership, advising that copy of Association's booklet, "The Tariff, Why Canada Needs it," has been forwarded and announcing that extra copies are available.

Bulletin No. 6, Ontario Division. October 28, 1921—Circular letter regarding Safety Calendar prepared by the Ontario Safety League, circulation of which among employees is suggested.

"The Tariff; Why Canada Needs It."—A 96-page book giving numerous arguments in favor of protection. Published, November 1, 1921.

Reasons for Optimism in British Columbia

B. A. McKelvie, manager of the Made-in-B.C. campaign has issued a memorandum to the supporters of the movement, from which the following extract is taken. It urges optimism and enumerates several reasons for viewing the outlook with hopefulness.

"Facts do not warrant the belief that there will be greater unemployment during the forth-

coming winter among the residents of British Columbia than last year. Despite this, however, there is prevalent a spirit of foreboding that is having the effect of bringing about that which all persons wish to avoid.

"Business men, having heard so much discussion of unemployment, soup kitchens, bread lines, etc., are displaying a tendency to tighten up their sales staffs and reduce their clerical workers, and will thus force into the ranks of the unemployed a class of worker that cannot undertake manual labor which will be offered as relief employment.

"The spread of this gospel of gloom will result in a dropping off of sales, with the consequent reduction of productive industry during the months of January, February and part of March, creating indeed a period of distress and unemployment.

"British Columbia today is in far better shape to meet the coming winter than a year ago. Today lumber camps and mills are working; mining is being resumed on a larger scale, not only in the Slocan district, but in the Stewart and other up-coast districts; Vancouver Island collieries are working larger staffs full time, as against three and four days a week last year; new mines have been opened; a dozen new industries have been established in the manufacturing centres of the province; upwards of 4,000 homes have been built in Greater Vancouver this year; lumber shipments for the nine months of 1921 have exceeded the normal export shipment of other years; two new railway lines are to be constructed this winter; and so it goes on. There is every indication in fact that the forthcoming winter will be better than last, but citizens generally must be brought to a realization of this, or else pessimism will prevail to the detriment of all classes of the community."

Report on Exhibitions and Fairs

The Commercial Intelligence Department furnishes the following particulars about fair exhibitions in which members of the Association may be interested:—

British Industries Fair:—Department of Overseas Trade, 35 Old Queen St., London, S. W., Eng. will be held in London and Birmingham from February 27th to March 10th.

The price for space, is 3/6 per square ft. British Industries Fairs are open to exhibitors within the British Empire on precisely the same conditions as to United Kingdom exhibitors. The minimum amount of space that can be allotted to an exhibitor is 36 square feet. Twenty-five per cent of the total sum payable in respect of the space applied for must accompany each application for space. Arrangements can be made through H. M. Trade Commissioner in Canada at Montreal, Toronto or Winnipeg.

British Trade Ship Limited: 12 Grosvenor Gardens, London, S. W., Eng.

The trade ship, "British Industry" has been specially designed by Messrs. Swan, Hunter & Wigham Richardson, Ltd., of Wallsend, Newcastle and Glasgow. She will be built of the style of a first class liner, her dimension being: length overall 559 ft.; breadth, 74 ft. 9½ in.; gross tonnage 20,000 tons. On the four main exhibition decks will be laid out exhibition stands and show cases. Accommodation is provided on the upper decks of the vessel for trade representatives, exhibition officials and others. The ship will leave London on August 21st, 1923, and the voyage is projected to South America, South Africa, Australia and New Zealand. Then it will proceed north to Japan, China, Phillipine, Java, Straits Settlements, India and back to England via Suez making calls at the principal ports.

There is a standard exhibition unit 8 ft. frontage, 6 ft. 3 in. depth. The cost of sites

for the trip ranges from £1,350 to £2,100, according to location. The charges for representatives travelling in the ship range from £1,500 per ticket to £3,000. This covers cabin, accomodation and all meals on board ship.

Daily Mail Ideal Home Exhibition: 1922: March 1st to 25th: 130 Fleet St., London, E. C. 4, Eng.

The exhibition is held at Olympia, London every two years and enjoys a huge attendance. At the last exhibition 325,000 people paid admission. Exhibits consist of all articles to be used in the house; furniture, labour saving device, electrical appliances, etc. To previous exhibitors the charge for space will be 7-6d per square ft. To firms who have not previously exhibited the charge for space will be 10s per sq. ft. The Daily Mail are offering £500 in prizes to architects for ideas and designs in labour saving houses and models of winning designs will be shown at the Ideal Home Exhibition."

British Permanent Sample Exhibition in Brussels: 1922: No. 9 Rue de Ligne.

It is expected that this will be started early in 1922 with the approval of the Federation of British Industries. The idea of the exhibition is to provide at a moderate cost a year's exhibition of British products and a year's propaganda for British activities. The exhibition would be prepared to reserve a special portion of the exhibition hall for the use of the Government of Canada and Canadian manufacturers for display purposes. Premises have been taken at No. 9 Rue de Ligne, Brussels consisting of two large halls with a floor space of 3,000 sq. ft. The rate for displaying signs, photographs, etc. on the walls would be approximately 30s per sq. ft. for the year. The exhibition will consist of show cases—the price for the standard case being £37.10 for one year. Arrangements can be made through Federation of British Industries, 39 St. James St., London.

Another Good Made-in-Canada Idea

An interesting example of how manufacturers may co-operate with each other in promoting the use of Canadian-made goods is furnished to INDUSTRIAL CANADA by R. R. Corson, president of Sovereign Perfumes, Limited, Toronto, a Canadian-owned firm exclusively engaged in the manufacture and marketing of perfumes and toilet requisites in a national way.

Mr. Corson writes:—"We are the only manufacturing house in Canada, using exclusively Canadian-made opal jars, collapsible tin tubes, etc. We insist, of course, that the quality of the Canadian-made must measure up to the imported, and we have found in every instance that the Canadian manufacturer can equal the imported in quality if he is leniently dealt with until he gets over the "rough spots", which every manufacturer meets with when he is taken up the making of a new line.

"To bring our line to the attention of the public and also calling the attention of the public to the quality of the Canadian-made jars, talcum tins, etc., we planned in the spring to have a Corson Made-in-Canada week in every city in Canada from Halifax to Vancouver. We opened the campaign in Toronto putting on the "Corson Made-in-Canada" week the first week in June and had the co-operation of about 97% of the druggists. We have now put this week on in Toronto, Hamilton, Ottawa, Brantford, Sault Ste. Marie, Winnipeg and London and have done the "spade work" for Vancouver and Victoria.

"As stated before, the public as well as being advised of this campaign, which primarily is to increase the sale of Corson's Perfumes and Toilet Requisites, is informed of the fact that the packages, containers, etc., are Canadian made."

Proposed Toronto Publicity Bureau

Owing to the difficulties which have been experienced from time to time in obtaining desirable literature of interest to prospective tourists, and for use in interesting conventions in coming to Toronto, and the great need which has been found for a properly-equipped organization in this city for dealing with such matters, a joint committee representative of several of the leading organizations of the city has, during the past summer, made a careful study of the best methods of making known Toronto's advantages and attractiveness to tourists and conventions with a view to inducing a large number of tourists to visit this city, and having as many conventions as possible meet here annually.

It is proposed that any person or firm in accord with the objects of the organization shall be eligible for membership upon the recommendation of the Executive Committee and that membership shall be for periods of three years. A nominal annual membership fee is suggested but nothing shall prevent any member voluntarily subscribing a larger amount.

The movement has the full support and co-operation of the Toronto Branch of the C.M.A., the Board of Trade, Canadian National Exhibition Association, Down-town Association, Gyro Club, Hotel Association, Kiwanis Association, Ontario Motor League, Rotary Club, Toronto Harbor Commissioners. F. D. Tolchard is Acting Secretary.

On motion by W. H. Hapley, seconded by T. F. Monypenny, Major L. L. Anthes, Anthes Foundry Co., Limited, and A. E. King, Dunlop Tire & Rubber Goods Co., Limited, were appointed delegates of the Toronto Branch to the new Bureau.

Late Senator Frederic Nicholls

At a general meeting of the Toronto Branch Executive held in the Board of Trade on 25th ult., George Bridgen called attention to the lamented death following an illness of several weeks, of Senator Frederic Nicholls, who was early associated with the C.M.A., of which he was Secretary, a position which he held for seven years. Senator Nicholls occupied a commanding position in the business and public life of this country, and had been a pioneer in its industrial development. His passing away would be an irreparable loss to Canada. Mr. Bridgen then moved that an expression of sincere condolence be conveyed to the deceased's family, the motion being seconded by W. B. Tindall and passed unanimously by a standing vote.

City Debt and Tax Rate

The Toronto Branch Executive at its meeting on November 3rd gave continued consideration to the situation created by the heavy city debt and tax rate and its effect on industry.

Copies of a report prepared by a Special Committee of the Toronto Branch have been circulated embodying a recommendation:

"That the manufacturers in the various wards be strongly urged to join the Rate-payers' Ward Associations so that by their taking a direct personal interest in their local activities, it may be possible to secure a selection of candidates that will satisfactorily represent not only business interests but the whole community and thereby secure more efficient and economical civic administration."

Many expressions of appreciation of the Committee's report have been received.

Another Phase of the Human Touch in Industry

The value of trade sections and the part they can play in increasing efficiency in production methods.

SOME years ago the Canadian Manufacturers' Association, in its wisdom, made provision for the organization within its membership of those engaged in similar or allied lines into trade sections, empowered to deal finally with all matters affecting the particular trade or industry, and required to submit only to the Executive Council such matters as might touch upon the broad policies in which the Association as a whole is interested.

In a number of instances advantage was taken of these provisions by groups wherein common interests were such as to warrant conferences between competitors. They were somewhat loosely knit, called together usually at the pleasure of the chairman. Some met fairly frequently, others at rare intervals, and some lacked the punch that keeps things going and were dissolved.

But the war came. To accomplish its task the nation pooled its resources. Manufacturers were called upon to surmount tremendous obstacles. Competitors of the type who had labored under the delusion that they had nothing in common with each other, whose only information respecting each other's methods of production and salesmanship was misinformation gleaned through gossip mostly prejudiced by self-interest, found themselves lined up in groups with their production resources, participating in accordance with their capacity, and at a common price, in order for supplies for defensive, offensive and re-constructive purposes.

This gave rise to a centralization of a large amount of overhead involving the organization of trade associations and the employment of permanent staffs. Some of the trade sections of the Canadian Manufacturers' Association found it necessary to so organize and became active trade associations serving very useful purposes in their own and the public interest.

Competitors found through association, one with the other, feelings of mutual respect and confidence taking the place of such feelings as are born of insularity, a tendency to disclose instead of to button up, to compete with each other on the basis of accurate information and not misinformation.

These tendencies, easily recognisable to any who watch the progress of events, led the Executive Council of the Canadian Manufacturers Association to authorize the organization of a department to be known as The Trade Sections Department, with special supervision over all groups who desired to use the Association's facilities for sectional objects. The Department has now been in existence for nearly three years. It was confronted in the earlier stages of its work with a tendency for some groups to drift away and set up expensive overheads of their own, but its work has been carried on nevertheless effectively and unobtrusively, with highly encouraging results. Without much advertising it is gradually becoming known that there is such a Department, and wherever a real need of its services has been manifested it has functioned satisfactorily.

It is not intended that the Department should function as a section promotor. Those engaged in a particular line of industry are the promotors, the Department supplying the facilities and services for inter-communication, and keeping the interest quickened.

Through its close contact with the other departments of the Association it is able to focus the attention of sections or groups upon problems arising out of the Association's general activities. By its association with the problems of groups it is able to assist in their solution through its broad experience with other groups and the Association's departmental machinery.

After all it may be said that the Department's most important accomplishment is the development of the human touch, closer acquaintance, mutual respect. Men have been brought together who have had to be introduced, and in a few months they have been addressing each other by their first names. Where formerly they were seeking information respecting each other in devious ways and through different sources, they are now talking across the table. The Department has seen a group of men who for years could not be brought together, eventually sit down and allow one to apportion out to each the cost of an advertising campaign running into many thousands of dollars. It has seen men who a few years ago would not think of consulting each other exchanging most intimate information respecting production problems. A standardization program is under consideration, from which the public will derive many thousands of dollars in value and an intangible value worth far more than dollars in convenience.

The activities of the sections are as varied as industry itself. The evidence of their usefulness is indicated by the interest of the members. Until recently regular meeting dates were unusual. Now they are the rule. There are some captious critics who hold that the BE ALL and END ALL of trade organizations is to regulate prices. The sectional activities of the Canadian Manufacturers' Association are in themselves a final and conclusive contradiction of such theories, for in no section is the subject discussed. Market conditions may be discussed with the greatest frankness. The effect on the market of what may be considered unwise sales policies may always be the subject of open and frank criticism, but to encourage by agreement any method of regulating prices is absolutely foreign to the Association's program.

On the contrary new sections have been organized from amongst groups of manufacturers who have tried under the name of some other association to experiment in the field of price regulation, an experiment which the Department believes is unsound and whose logical result is failure.

The Department believes that its facilities could be used to advantage by many other groups of manufacturers, not only those who are at present unorganized but those who have seen fit to go outside and set up other organizations with resultant overheads of their own. The Canadian Manufacturers' Association is equipped to supply such services efficiently and effectively. Why then should members add to the cost of carrying on business, fees devoted to the maintenance of partially competitive associations.

The ultimate conception of the Department is the development of a corps of secretaries, each studying the needs of particular groups of industry, but all co-ordinated, and from the progress that is being made it may not be long before the conception is realized.

News of the Month from Maritime Division

Headquarters of Division—Amherst, Nova Scotia

Chairman.....L. W. Simms, T. S. Simms & Co., Ltd., St. John, N.B.
 Vice-Chairmen.....C. S. Sutherland, Amherst Boot and Shoe Co., Ltd., Amherst.
 J. A. Marven, J. A. Marven, Limited, Moncton, N.B.
 J. E. McLurg, Halifax Shipyards, Limited, Halifax, N.S.
 Secretary.....H. R. Thompson, Box 470, Amherst, N.S.

EFFORTS which were started last spring under the auspices of the Maritime Division, towards the formation of an association of employers being assessed under the New Brunswick Workmen's Compensation Act, and which were discontinued during the summer months, are now being resumed. The intention is to take advantage of certain clauses in the Compensation Act which provide for the recognition of associations whose constitutions have been approved by the Compensation Board. The Board, however, is in doubt as to the correct interpretation of these clauses and this has delayed the organization work. A decision has been given as to one phase of the proposal, inasmuch as the Board has ruled that it cannot recognize an association unless sufficient of the employers, to be representative of the groups or classes making up the association, approved of the formation of such an association. The Secretary of the Division has lately addressed a circular to the principal employers in classes 1-2-3-4, explaining the proposal and asking if such has their approval. Further action will depend to a large extent on the number and nature of the replies.

Briefly, the principal objects of the proposed Association are:—

1. To establish a medium through which the employers, assessed under the Act, may secure and discuss, among themselves and with the Compensation Board, all details in connection with the administration and operation of the Act, and thereby endeavor to safeguard their interests.
2. To carry on, if later deemed advisable, a properly organized accident prevention campaign, with a view to reducing the industrial accident hazards and thereby reducing the assessment or insurance rates.

It is felt that under an act of this nature, which may be concisely described as a compulsory mutual insurance system administered by the state, where the individual employer is relieved of his individual liability to pay compensation, and the obligation is thrown upon the employers in groups—the premium payers (the employers) have common interests in questions of classifications, ratings, disbursements of funds, cost of administration, accident hazards, etc. and that the logical accompaniment is some scheme of representation of the employers who are compelled to furnish the money required to carry out the provisions of the Act.

If it is found that the Compensation Board is not in a position to approve of the formation of an association with the proposed objects and powers, the employers will probably approach the local government during the next session of the House, and request the necessary amendments to the act.

Tidal Power

Anyone who has witnessed the great rise and fall of tides, in the Bay of Fundy, cannot help thinking that some day someone will find a satisfactory means of harnessing these tides and utilizing the power for the benefit of humanity. Harnessing the ocean for the purpose of developing electrical power has been the ambition of engineers and inventors since time immemorial. The French, in the Acadian times, had some degree of success in this connection as evidenced by some small developments which are still extant in the land of Evangeline, along the shores of the Basin of Minas (N.S.). These were not

sufficiently successful, however, to encourage a general or extensive development.

Now along comes a resident of Halifax, by the name of O. H. Parsons, who has invented certain devices which he claims will solve the problem and make the dream of abundant cheap power, a reality. Mr. Parsons, while rather modest about his achievement, assures us that with a reasonable application of his patented devices, thousands of horse power will be readily available. It is claimed that men of prominence have passed favorably on the invention, but time alone will tell the tale—here's hoping.

In the meantime, some of the provincial governments' hydro-electric schemes are nearing completion and it should only be a matter of weeks before Halifax, St. John and other communities will be receiving the advantages of cheaper power.

Wages in Coal and Steel Industries

The coal and steel industries in Nova Scotia are of such importance to the community, that everyone is interested in and indirectly affected by the announced reductions in the wages of the employees in these industries.

Formal notice of the intention to reduce the wages of about 12,000 miners, when the so-called Montreal agreement expires on November 30th, was recently served by the principal operators, on J. B. McLachlan, Secretary Treasurer of United Mine Workers of District 26. The amount of the intended cut is not stated. The miners have already expressed their intention of resisting wage cuts to the utmost, so the outcome of the struggle is awaited with no little degree of interest. The representatives of the operators and miners are to have a conference in Halifax on November 10th. In making the announcement of the cut, the operators state that they do not desire to reduce wages and would be happy to continue the present rates if the market conditions would permit, but unfortunately such is not the case.

Almost concurrently with the announcement of the wage cut, the members of the United Mine Workers in Nova Scotia have been called upon to pay an assessment of one dollar per member, for the months of November, December and January. Similar action is being taken in all of the districts throughout Canada and United States where the miners are organized. The explanation given for this special levy is that the international treasury has been so depleted by extraordinary expenditures during the past year, that it is necessary to secure additional funds for present and immediate requirements. The organization has approximately a total membership of 500,000 and the levy should net almost one and a half million dollars.

The Dominion Iron and Steel Company of Sydney has given notice of a ten per cent. reduction in wages and the Steelworkers' Union is taking steps to oppose it. A committee is being appointed to meet the management and a telegram has been sent to the Minister of Labor requesting that a board be appointed to investigate the conditions in the steel industry, particularly as regards the necessity for wage reductions. The men claim that the wages have been reduced out of proportion to the reduction in the cost of living and point out that with this latest cut, the wages will fall over 35 per cent. below the 1920 standard. On the other hand, the

company states that with the present rates of wages being paid in the Nova Scotia steel and coal industries, it is impossible to manufacture steel at a cost which will meet competition.

Mothers' Allowances

The Commission which was appointed in December, 1919 by the Nova Scotia Government to enquire into the desirability for a scheme of mothers' allowances, has recently published its report. The Commission recommends the passing of a "Mothers' Allowance Act" by which payments may be made in certain cases to mothers of children. The scheme to be provincial in scope and a direct tax on the whole province and the act to be administered by a minister of the Crown, assisted by an advisory commission, with local advisory committees.

Railway Equipment Wanted by Firm in China

INDUSTRIAL CANADA is in receipt of the following communication from an important firm of importers in Shanghai, China. Canadian manufacturers of railway equipment and supplies should note its contents carefully. On receipt of inquiries, the name of the correspondent will be furnished to interested parties.

"We thank you for your letter of 16th. August, and have to inform you that the Annual Convention Number of your journal has now reached us. We have perused its pages with interest, and trust we may establish business connections in the near future with the firms advertised therein.

"*Railway Material*:—Builders of locomotives, carriages, wagons and all railway material attract our special attention. It may interest them to know our enquiries consist of all weights of passenger, goods and small shunting engines, also railway wagons and coaches of every type.

"*Basis of Quotations*:—In the majority of cases manufacturers would be required to quote us on clients' specifications and drawings, but to meet the lesser enquiries we should be provided with blue prints and descriptive catalogues illustrating their respective manufactures.

"*Catalogues*:—We should be supplied with a liberal quantity of descriptive loose leaves omitting prices, which should be given separately and suitably arranged for ready reference to the material concerned.

"*Prices*:—Prices should be c.i.f. Shanghai including insurance against breakage where necessary, and all charges excepting those of duty and dues. The advantage of being able to quote clients an approximate price on sight is so great that we recommend manufacturers advising us immediately of any material change in their estimates, on which we would cable them for confirmation when a firm figure is required.

"*Shipping Weights*:—Shipping weights should be made up in detail, and it would further assist us if they showed the approximate percentage to be added to or deducted from their c.i.f. Shanghai price to enable us to calculate a round figure for delivery to the principal ports in China.

"*Delivery*:—We attach great importance to fulfilment of delivery in accordance with the time stated by manufacturers, and would therefore expect them to make conservative promises and to make every endeavor to keep the same.

"Manufacturers will, of course appreciate that our chances of securing business depend on their offering rolling stock strictly in accordance with our specifications and at rock bottom prices. We should be pleased to hear from those who are disposed to co-operate with us on the above-mentioned lines, and in the meantime wish to thank you again for the copy of your interesting journal."

This Month's Activities in Quebec Division

Headquarters of Division—113 Board of Trade Building, Montreal

Chairman.....J. H. Fortier, P. T. Legare, Ltd., Quebec.
Vice-Chairman.....F. W. Stewart, Cluett, Peabody & Co., of Canada, Ltd., Montreal.
Secretary.....R. W. Gould. Travelling-Secretary.....L. D. Loranger.

ONE of the best best attended and most interesting meetings in the history of the Quebec Division Executive Committee was held on October 19 at Sherbrooke.

Representatives from many of the industrial centres of Quebec were present and an important agenda of business was discussed. Chet. H. Cleveland, the chairman of the Sherbrooke Branch, greeted the out-of-town members at the outset of the meeting and expressed the appreciation of the local branch in having them in that city.

The workmen's compensation act was discussed at some length and the report of the special committee appointed to enquire into this matter was received and adopted with but a few minor changes and recommendations.

In the matter of unemployment, the secretary was instructed to write to the mayors of all corporations and the wardens of all municipalities in the province of Quebec pointing out that, under special legislation passed at the last session of the legislature, it was now possible for corporations and municipalities to borrow money from the provincial government at a very nominal rate of interest for the erection of dwellings. It was urged that, where practical, advantage should be taken of this legislation. Houses, it was pointed out, could be built from the proceeds of such borrowings and in their erection unemployment would in a measure be relieved.

Regarding rail and express rates in Canada, it was decided to recommend to the Executive Council of the Association that the Railway Commission be urged to order a general reduction in freight rates throughout the country.

J. H. Fortier, chairman of the Quebec Division occupied the chair. Others present were W. D. VanRoden, R. E. Barrett, A. Neighorn, H. M. Holbrook, H. Bruce Fletcher, Chet. H. Cleveland, A. Sangster, S. F. Ruth-erford, Charles B. Howard, P. A. Galarneau, A. A. Munster, A. P. Robitaille, Raoul Renaud, Charles A. Joslin, Joseph Picard, James Lowe, J. R. Sangster, George D. Mac-Kinnon and R. W. Gould.

Bonusing of Industries

A movement is on foot at the present time, begun by the real estate board of the Montreal Board of Trade, having as its objective the amendment of the provincial statute relative to municipal authority to bonus or exempt from taxation such corporations as they may be able to attract to their borders.

At the present time municipalities are not permitted, under the law, to offer inducements of this kind to companies seeking sites for the erection of factories or for the carrying on of business. Those who have made the initial move in the effort in Montreal declare that since this legislation has been on the statute books of Quebec many manufacturing concerns and industrial enterprises have passed up the province of Quebec when seeking location and have gone to the sister province of Ontario. There the corporations and municipalities still have permission to bonus an industry or exempt it from taxation.

The committee of the real estate board of the Montreal Board of Trade laid its case before the Municipal Affairs Committee of the Montreal Branch of the C.M.A. a few days ago. The sponsors of the movement stated that on principle they were unanimously opposed to either bonuses or tax ex-

emptions but so long as municipalities in the province of Ontario grant tax exemptions, the municipalities of Quebec should be in a position to compete, subject always, to the final approval of the Provincial Minister of Municipal Affairs.

The municipal affairs committee of the Montreal Branch agreed with the attitude of the real estate board of the Montreal Board of Trade and will present the arguments of the latter organization to the next meeting of the Executive Committee of the Montreal Branch.

Meeting of Montreal Branch

An interesting meeting of the Montreal Branch of the association was held in the Montreal Club on October 12. B. W. Coghlin the chairman, presided and there was a good attendance. The record of attendance at the executive meetings of the Branch during the opening months of the fiscal year has been very encouraging and has so far eclipsed the record of the previous year during the corresponding period.

As at the meeting of the Quebec Division in Sherbrooke, the question of the Workmen's Compensation Act was given considerable attention. The chairman was appointed the representative of the Branch on the Board of Governors of the Montreal Technical Institute.

Unemployment was discussed and the action taken by the Division Executive was concurred in.

The question of apprentices and their status under the law was introduced by W. A. Desbarats who stated that recently a decision had been handed down in the Recorder's Court of Montreal in connection with the printers' strike which he feared would prove a troublesome precedent if it were not given the attention of the Branch. He said that the Graphic Arts Section of the Montreal Branch had the matter under consideration and intended to take action.

The decision was in the case of an apprentice who went out on strike with the journeymen printers. The company in question brought the apprentice before the court charged with deserting his post. The union backed up the apprentice and the court held that the contract between the company and the apprentice during the course of a strike became of non-effect and would only be valid after the strike had been duly settled.

It was decided that the Montreal Branch should enquire into this matter, report upon it and take such steps as might be deemed advisable under the circumstances.

There were present, besides the chairman. Messrs. Art. Harries, A. O. Dawson, J. Beaubien, John Irwin, W. H. Miner, W. R. Granger, Fred Whittall, W. A. Desbarats, N. M. Yuile, H. T. Diplock, A. Neighorn, R. Montague Davy, A. D. Huff, P. E. Joubert, F. G. Daniels and the secretary.

Montreal Export Club

The final organization meeting of the proposed Export Club of Montreal and District will be held about the middle of the month. Following a questionnaire sent to the members of the Division, it was found that a large number were interested in the formation of such an organization in the province.

Many manufacturers are again turning their faces export-ward in the course of their business activities. The results of the questionnaire have been compiled in a comprehensive way in order that the organization

committee might ascertain to what extent our members were interested and what manufactured products it was the desire of the manufacturers to export.

There is promise of a well attended meeting at the inaugural effort and Quebec hopes to have one of the most active organizations of its kind on the continent.

Meetings of Trade Sections

One by one our various trade sections are renewing their activities after the summer season of leisure. The Wooden Box Section formed last year will begin its meetings this month; the Sign Manufacturers' Section will also resume its meetings.

On Tuesday, November 8th the Fine Shirt Section held a well attended meeting in the King Edward Hotel in Toronto. This section is a particularly active one, under the chairmanship of F. W. Stewart of Cluett, Peabody & Co. of Canada, Limited.

Many other sections have held their meetings during the past month. This department of activity is rapidly gaining in importance and effectiveness.

F. G. Daniels, general manager of the Dominion Textile Company and vice-chairman of the Montreal Branch, has returned after a business visit to the textile centres of the British Isles. He is at present absent again on a visit to the cotton centres of the United States.

Michael Hirsch of J. Hirsch & Son, and chairman of the Municipal Affairs Committee of the Montreal Branch has returned after a business trip to New York.

Julian C. Smith, president of the Shawinigan Water and Power Company and chairman of the special committee on The Workmen's Compensation Act, recently concluded a comprehensive business visit to the United States and is now absent in Western Canada.

Paul Herbert of Quebec, a member of the Divisional Executive has returned home after a visit to American centres.

Re-open Mill

After Shutdown of Year, Cameron Lumber Co. Starts Operations at Victoria

The Victoria, B.C. plant of the Cameron Lumber Company has resumed operations after a shutdown of nearly a year. The *Victoria Colonist* quotes J. O. Cameron, president, as saying:—

"The railroad strike appears to be settled for the time being, and the general improvement in market conditions has convinced us that it is worth while to start operations again. We have orders on hand now that will be sufficient to keep the mill busy for at least a month, and we will cut 500,000 feet of hemlock squares for Japan as our first contract. Rail trade is furnishing many inquiries, and the railroads themselves are in the market to a greater extent than usual for ties, bridge timbers and material for depot construction."

The Genoa Bay Lumber Company at Genoa Bay, which is owned by the Cameron Lumber Company, has been operating continuously, catering exclusively to the export trade. As a result of lowering wages about 50 per cent. coupled with a slightly easier market for logs, it has been possible to operate the Genoa Bay mill while the business conditions did not warrant operation of the Victoria plant.

With the reopening of the mill 200 men will receive employment. During the long period of inactivity the mechanical force was maintained practically intact, so that no reorganization of personnel will be necessary. The equipment has been kept in preparation for resumption at short notice, so that there will be no delays in getting down to a normal production basis.

Ontario Division's Activities for the Month

Headquarters of Division, Bank of Hamilton Building, Toronto

Chairman.....W. C. Coulter, Booth-Coulter Copper and Brass Co., Ltd., Toronto.
Vice-Chairman.....A. W. White, Geo. White & Sons Co., Ltd., London.
Secretary.....H. Macdonald. Travelling Secretary.....O. C. Pease.

A JOINT committee of safety organizations in Ontario has been formed for the purpose of studying the whole problem of accident prevention and safety devices, the organizations represented on the joint committee being the Industrail Accident Prevention Associations, the Ontario Pulp and Paper Makers' Safety Association, Electrical Employers' Association, Lumbermen's Safety Association, Ontario Safety League, Workmen's Compensation Board of Ontario and the Ontario Department of Labour.

At the organization meeting of this committee, H. Macdonald, Legal Secretary, C.M.A., was appointed chairman and R. B. Morley, Secretary, Industrial Accident Prevention Association, Honorary Secretary.

The committee discussed the work at present being performed by the various safety organizations with a view to recommend such changes of procedure as may prevent overlapping of effort and secure greater efficiency towards a reduction of accidents, as the only means through which a saving of assessments can be effected. This is the first time that the various employers' associations have met on a common platform with the Workmen's Compensation Board and the Provincial Department of Labour, and substantial results are looked for as a result of the combined effort of the various organizations.

It was agreed that a joint convention on accident prevention should be held in Toronto early in the spring, by which time it was expected the notices from the Workmen's Compensation Board for 1922 assessments would be available. It is expected that this will be the most important safety convention yet held and it was agreed to extend an invitation to the Border Cities' Safety Council to be represented. The Committee charged with the arrangements will co-operate with the C.M.A. and other trade bodies to secure the widest possible publicity among employers and others in Ontario. Advance copies of papers for the press including trade magazines, will be supplied for release on date delivered at convention, and the press will be invited to publish editorials and other press comment on the value of accident prevention.

As an initial step, the Honorary Secretary was asked to communicate with various organizations asking them to name members for an advisory committee to be composed of the leading men representing the interested groups.

Employment Service Councils

The Province of Ontario, in co-operation with the Employment Service of Canada, has established throughout the province some twenty-six employment offices. The work of these offices has increased to such an extent that it was felt that better service would result if the advice and co-operation of the general public were solicited. For this reason, at its last session, the Legislature passed an amendment to the Trades and Labour Branch Act which provides for the establishment of a Provincial and Local Employment Service Council.

With the appointment of Jas. H. H. Ballantyne as Deputy Provincial Minister of Labour it is now proposed to organize the Provincial Council. While its duties and responsibilities have not been definitely decided upon, the following is a tentative outline of its functions:

1. To make recommendations to the Minister of Labour with regard to general policy in such matters as the number and type of offices to be established or maintained, the location, premises and equipment of such offices and publicity.
2. To advise on the organization of the provincial employment service, and generally to promote efficiency in its administration.
3. To consider methods and devise plans for preventing or alleviating unemployment in the province, and to enlist the co-operation of employers, employees, the provincial and municipal authorities and other interested parties and organizations in the promotion of such plans.
4. To advise on the bringing into or sending out of the province of any considerable body of labour.
5. To secure the co-operation of provincial organizations of employers and employees in the use of the employment service.

The Council is to be equally representative of employers and employees, and it is the desire to secure the co-operation of the various organizations most interested in the work of the employment service.

It might also be added that provision has been made for the payment of a nominal per diem allowance and travelling expenses to members of the provincial council while transacting the business of the council.

It is proposed that the constitution of this Council will be as follows:—Employers, two representatives; Employees, two representatives; Soldiers' Organizations, two representatives, with one lady representative and an independent chairman.

The Ontario Division Executive has nominated W. H. Shapley, Sterling Action & Keys, Limited, as its representative, and the building interests are expected to nominate the other employers' representative.

Municipal Minimum Wage

The revolt against the continued in-action of the Toronto City Council towards reducing the 60 cent minimum wage to unskilled labour employed by the municipality is obviously spreading. A number of the business men's associations are organizing for the purpose of making their voice and influence felt, should the City Council not yield to the pressure of public opinion.

Serious effort is now being made by those who have the best interests of the community at heart to obtain more reasonable costs and so encourage investment and stimulate business. Honest, labour claims that they would rather have work than charity. Wages are the foundation of all costs and must be reduced if prices are to become more normal. The City of Toronto rate for common labour threatens to equal if not exceed the rate paid to skilled men in some trades. With the great number of deserving citizens out of employment, there is no logical reason why this city should pay such excessive rates. Why should the city of Toronto undertake to set up a striking precedent against the return to normal conditions by maintaining a rate for common labour, at least 30% in excess of the prevailing rate of similar labour in general industry?

The reason is rapidly advancing and there is every need to encourage the greatest possible amount of construction work as quickly as possible. Otherwise, it will be too late to

favourably affect the situation this year, and the coming winter may see a most deplorable condition in industry with greater unemployment than existed during the past winter. The industries of any community are the foundation of its growth and prosperity. If the taxes are to be maintained at as high a point, and further increased unduly, the City of Toronto will no longer be attractive to new industries.

Committee on Unemployment

A number of meetings have been held by a joint committee organized by the Hon. Premier Drury to consider and endeavour to find a remedy for the threatened unemployment condition during the ensuing winter. On the committee, the following interests are represented: the Provincial Government, Ontario Division, C.M.A., Toronto Board of Trade, Builders' Exchange, Retail Merchants' Association, banking and financial interests and organized labour.

On the suggestion of Premier Drury, a series of principles has been adopted, which merely ask all interests to come down to present cost, whatever that might be. The Provincial Government then suggests that it spend money in advertising to create a "buying sentiment" in the province.

The Association, accordingly, on October 8th, addressed a circular to all manufacturers, members of the Ontario Division, enclosing a form of questionnaire for the purpose of obtaining confirmation of our statement to the Government that so far as the manufacturers are concerned, present prices are being based on cost of replacement.

Out of a total of 1900 firms circularized, 535 replies were received to date, of which 504 stated that it was the present policy to base prices on cost of replacement. Six replied that to go any lower would be to shut down until labour is willing to make it possible to operate. On the question of the Government's proposed campaign of publicity, opinion is distinctly divided.

Upon the subject of unemployment, on which the Committee was originally organized by Premier Drury, although no definite proposals have so far been advanced by the Government, the view expressed by the Ontario Division that each locality should take care of their own unemployed as they knew them best, has received practically unanimous approval, as expressed by the questionnaire.

Bureau of Municipal Research

At a meeting of the Toronto Branch Executive held on November 3rd, a letter was submitted from John Macdonald, President, stating that the Bureau not being in any sense a charity had resigned its membership in the Federation for Community Service, while retaining its friendly relations and its co-operative membership therein, and announcing that it is the intention of the Bureau in the near future to appeal for support of its work direct to the general public at large.

The Toronto Branch Executive agreed unanimously that the value of the Bureau to the community as an educative force during its eight years of service, in furnishing special information and giving direction to public opinion in civic affairs merited the full support of public-spirited citizens.

Sam J. Williams Honoured

At a meeting of the Toronto Branch Executive held on November 2nd, it was unanimously agreed that Sam J. Williams, formerly president of the Williams, Greene & Rome Co. Limited, of Kitchener be recommended for honorary membership in the Association.

Activities of the Month in Prairie Division

Headquarters of Division, 408 Avenue Block, Portage Avenue, Winnipeg

Chairman.....W. G. Fraser, Beaver Soap Co., Ltd., Winnipeg.

Vice-Chairman.....J. W. Ackland, J. D. Ackland & Sons, Winnipeg.

Secretary.....G. E. Carpenter.

WHEN the annual convention honored the Chairman of Divisions by electing them members of the Executive Committee of the Association, it also placed upon them an added responsibility. Deeply realizing this W. Gordon Fraser, Chairman of the Prairie Division, decided that in order that he might properly represent the membership in the Prairie Division it was necessary that he visit the members of the various branches and secure their views with respect to the C.M.A. and its policies.

During the month of October, Mr. Fraser accompanied by the Secretary of the Division, visited the Saskatoon, Edmonton, Calgary, Medicine Hat, Moose Jaw and Regina branches of the Prairie Division. Mr. Fraser was warmly welcomed by the members of each of the branches and during his visit, meetings were arranged which, from the standpoint of attendance and enthusiasm in C.M.A. work, surpassed any meetings that have been held in these branches for some time.

There is no doubt Mr. Fraser's visit will prove beneficial in promoting better fellowship among members in the West and in increasing the usefulness of the Association to the membership in that territory. There is evidence of this already by the increased number of communications received by the Prairie Division office. (Mr. Fraser's address will be found on Page 61).

Welcomes New Members

That Prairie manufacturers are not discouraged by the slowing up of general business conditions is evidenced by the fact that during the past 4 months, the Membership Committee of the Winnipeg Branch secured 58 new applications for membership in the C.M.A. To these new members the Association extends a hearty welcome, and in doing so congratulates the Membership Committee of the Winnipeg Branch for its active support in this splendid achievement. The fact that 58 firms have applied for membership in the Winnipeg Branch since the annual meeting shows that the work which the Association is doing on behalf of Canadian manufacturers is much appreciated in the West. Service is the keynote. To our new members WELCOME!

Redbo Limited.

C. & J. Jones.

John Deere Manufacturing Co.

Guarantee Iron & Drop Forging Co.

Standard Underground Cable Co.

Prest-O-Lite Co. of Canada, Ltd.

Canadian Explosives, Ltd.

Canadian Insulation Co.

Canadian Community Cut Glass.

Jacob Crowley Mfg. Co.

Hadden Manufacturing Co.

Canadian Hotel Supplies.

Western Truck & Body Co.

Canadian Shredded Wheat Co.

Cluett Peabody Co.

M. Vanpouille Church Goods.

Acme Paper Box Co.

Pollard Bros.

Phoenix Mfg. Co., Ltd.

M. Sokolow Sheet Metal

The Canadian Regalia Mfg. Co.

Manitoba Stencil & Stamp Works

Canadian Stamp Co.

Johnsons' Electric Cooko, Ltd.

Stoller Bros.

Boroditsky Bros.

Singer Headwear Mfg. Co.

Langley Electric Mfg. Co., Ltd.

British Knee Pant Co.

Tooke Bros.

Guarantee Sheet Metal & Roofing Co.

Juveniles' Limited.

Great West Knitting Co.

New York Brand Cap Co.

Geo. L. Kirschner.

Smale-Skidmore Sign Co.

W. A. McKim Mfg. Co.

Winnipeg Furniture Co., Ltd.

Canadian Shirt & Overall Co., Ltd.

B. B. Aerated Water Mfrs. Ltd.

K. B. B. Manufacturing Co.

Toothills (Canada) Ltd.

City Wire & Iron Works.

Home Appliances Mfg. Co., Ltd.

Elm Sheet Metals, Ltd.

Winnipeg Paint & Glass Co., Ltd.

Porcupine Boot Ltd.

Dominion Rubber Systems (Man.) Ltd.

Dominion Rubber Systems (Alta.) Ltd.

Canada Weekly Printing Co., Ltd.

Picardy Candy, Ltd.

Antique Furniture Makers.

Milo-Wheat Co., Ltd.

Winnipeg Statuary Co.

Winnipeg Marble & Tile Co.

S. Shore (Candy Factory)

R. J. Inglis, Ltd.

Winnipeg Casket Co.

Saskatchewan Labor's Proposals

The following programme of proposed legislation was laid before the members of the Saskatchewan Government on October 19 by representatives of the Saskatchewan Executive of the Trades and Labor Congress of Canada:—

1.—Amendments to the Workmen's Compensation Act providing for a state insurance administered by a board, compensation to be awarded on the following basis: (a) On the death of a workman, funeral expenses to be allowed to the amount of \$150; (b) Widow or invalided husband to be allowed a monthly payment of \$45, and \$10 additional for each child, the total not to exceed \$75 a month; (c) Upon a workman suffering temporary or permanent total disability he is to be allowed 100 per cent. of his wages for the first ninety days and 75 per cent. thereafter; (d) Upon a workman suffering temporary or permanent or partial disability, he is to be allowed an amount equalling 75 per cent. of the difference in his earning power; (e) Medical aid to be allowed and full expenses to be taken from the accident fund.

2.—Legislation embodying the decision of the International Labor body, which includes provision for an eight-hour day for workmen, protection of women before and after childbirth, prevention of the employment of women during the night, and prevention of the employment of children in industry under 16 years of age.

3.—An amendment to the Election act providing that all employers shall cause to be posted up in their place of business, not less than five days previous to an election, in a conspicuous place, a notice to the effect that on the date set for the election all employees shall have two hours apart from the usual lunch hour for the purpose of voting, without deduction of pay.

4.—An act providing for the examining and licensing of electrical contractors and journeymen electricians.

5.—Legislation to take care of unemployed and prevent, where possible, unemployment.

6.—Legislation providing for the use of the proportional representation system of voting and ballot counting, with group constituencies in provincial elections.

7.—The abolition of the election deposit.

8.—Labor representation on government boards.

Several Western provinces have compensation acts on the statute books providing for the collection of insurance premiums from employers and the administration of benefits to injured workmen by a Government Board and generally these acts appear to be giving satisfaction to both the employers and the workmen. However, it will be noted that Saskatchewan labor is working for compensation based upon 100% of wages paid for the 1st 90 days disability and 75% thereafter. This is a material increase over benefits paid in any other Western province, which vary from 55 to 66 2-3 per cent. after a waiting period of from three to six days.

The several branches of the Prairie Division in Saskatchewan have the matter in hand with a view to having an act introduced which, while it would provide adequate benefits for injured workmen, would not be an undue burden upon manufacturers in Saskatchewan compared to adjoining provinces.

Inasmuch as no other provincial governments in Canada have enacted an eight hour day for workmen, it is felt unlikely that the Saskatchewan Government would be the first to introduce this drastic legislation, especially under present conditions.

Other matters embodied in the programme are receiving consideration by the Saskatchewan branches.

Accident Prevention—Alberta

The supervision of accident prevention in Alberta has been transferred from the jurisdiction of the Chief Factory Inspector to the Workmen's Compensation Board, which is proceeding to make it effective. A member of the Board is visiting manufacturers in the principal places of employment in the province and arranging that they have two or three of their workmen appointed an accident committee in the plant. Then the Compensation Board employ a doctor and a St. John's Ambulance Corps instructor to educate this committee, giving one lecture each week for a period of seven weeks and then hold examinations for which certificates are given. There is no charge for this service beyond 60c for a book of instructions and 25c for a bandage, which is usually borne by the employer. The Compensation Board states that where these committees have been formed and have taken the examination, much good has resulted in confining the result of accidents to the least possible term of disability. For instance, a simple fracture has been prevented from becoming a compound fracture, etc.

S. B. Brown's Visit

The Transportation Committee of the Prairie Division was favored with a visit from S. B. Brown, Assistant Manager of the Transportation Department, on October 24th. Mr. Brown came direct from Vancouver and was able to give the Committee first hand information with respect to British Columbia's application for Prairie scale of rates in the Mountain territory. Advantage was taken of Mr. Brown's visit by several members to consult with him respecting transportation matters affecting their particular business and his advice was much appreciated by them.

The seventh Cycle and Motor Cycle Show will be held in Olympia, London, W., from November 28 to December 3. Practically every British manufacturer of cycles, motor cycles and three-wheeled cycle cars will be exhibiting, together with a large number of manufacturers of tires, engines, components, accessories and specialties.

News from British Columbia Division

Headquarters of Division, 705 Board of Trade Building, Vancouver

Chairman.....J. B. Thomson, Jas. Thomson & Sons, Ltd., Vancouver
 Vice-Chairman.....R. W. Mayhew, Sidney Roofing & Paper Co., Ltd., Vancouver
 Secretary.....H. Dalton

A REGULAR steamship service between Mexican ports and the port of Vancouver will be in operation before long, providing the necessary means of water transportation for development of trade between Canada and the republic to the south, it was announced on October 7th, by Hon. H. H. Stevens, Minister of Trade and Commerce, during the course of a luncheon at which he was the leading speaker, tendered the members of the foreign trade bureau of the Vancouver Board of Trade aboard the R.M.S. "Makura" by J. C. Irons, local manager of the Canadian-Australasian line.

The minister said that, acting upon instructions of President D.B. Hanna of the Canadian Government Merchant Marine, B. C. Keeley, General Agent in Vancouver, had arranged to extend the C.G.M.M. service now operating between Vancouver and San Francisco, south to Pacific ports in Mexico, and that a special representative from the local office would leave in a day or two to appoint local representatives at Mexican ports to handle that end of the business.

Division Entertains Port Authorities

In conjunction with the Vancouver Harbor Board, the British Columbia Division on October 17, entertained at dinner at the

Hotel Vancouver, visiting members of the Pacific Coast Association of Port Authorities. There were also present as guests, Hon. H. H. Stevens, Minister of Trade and Commerce, S. J. McLean, vice-chairman, and Dr. Rutherford, commissioner, of the Dominion Railway Board.

Col. G. H. Kirkpatrick, chairman of the Harbor Board and president of the Pacific Coast Association of Port Authorities, acted as toastmaster. The speakers included Benjamin Thompson, Tampa; Rufus Choate, San Diego; Hon. Mr. Stevens, S. J. McLean and Dr. Rutherford. J. B. Thomson, chairman of British Columbia Division, also made some interesting remarks on transportation and shipping matters.

Union Oil Company of California

A new oil refinery for Vancouver, to be followed by the installation of a distributing system involving an early expenditure of some \$4,000,000 is forecast in the report of the decision of the Union Oil Company of California to invade the British Columbia market. It is stated that options have been taken for the purchase of the B.C. Refining Company's plant near Barnet, 12 miles east of Vancouver. This property has deep water frontage on Vancouver harbour which will

permit of oil tankers delivering crude oil direct to the company's wharves at that point. For some time past the Union Oil Company has been bringing crude oil into Vancouver and it is now reported that they have definitely decided to enter the market for refined oils and will use the plant and equipment of the B. C. Refining Company until such times as new and enlarged equipment is installed.

British Columbia Lumber Shipments

Seventy-three cargoes for a total of 72,815,500 feet of lumber left this port for practically every country in the world during the first six months of the year, according to figures posted at the Vancouver Merchants Exchange. The C.G.M.M. freighter "Canadian Highlander", with a cargo of 4,700,000 feet, which sailed on June 9, carried the record cargo of the season.

The month of June was by far the biggest for the six months period, about 25,000,000 feet leaving this port during the thirty days. Following are the monthly figures: January 9,438,000 feet (board measurement); February, 7,772,000 feet; March, 10,703,000 feet; April, 13,411,500 feet; May 6,300,000 feet; June 25,191,000 feet; total 72,815,500 feet.

Of this total the Orient took the largest number of cargoes for 17,422,000 feet. Japan took something over 12,000,000 feet and Australia and New Zealand showed up well with a total of 11,328,000 feet. Following shows the shipments to the various countries of the world: United Kingdom, 4,770,000 feet; United States, 5,210,000 feet; Montreal, 1,900,000 feet; South America, 2,800,000 feet; Australia and New Zealand, 11,328,000 feet; India, 7,950,000 feet; Hawaii, 1,000,000 feet; Egypt, 8,300,000 feet; Japan, 12,115,000 feet; Orient, 17,442,000 feet; total 72,815,500 feet.

Statistics for the month of September show that twenty-two cargoes left this port for a total of approximately 19,000,000 feet. The freighter "Canadian Traveller", of the C.G.M.M. fleet, carried the biggest shipment, when she loaded 8,704,000 for Australia. The Orient was again the biggest market, Australia taking only three cargoes, for total of approximately 3,000,000 feet.

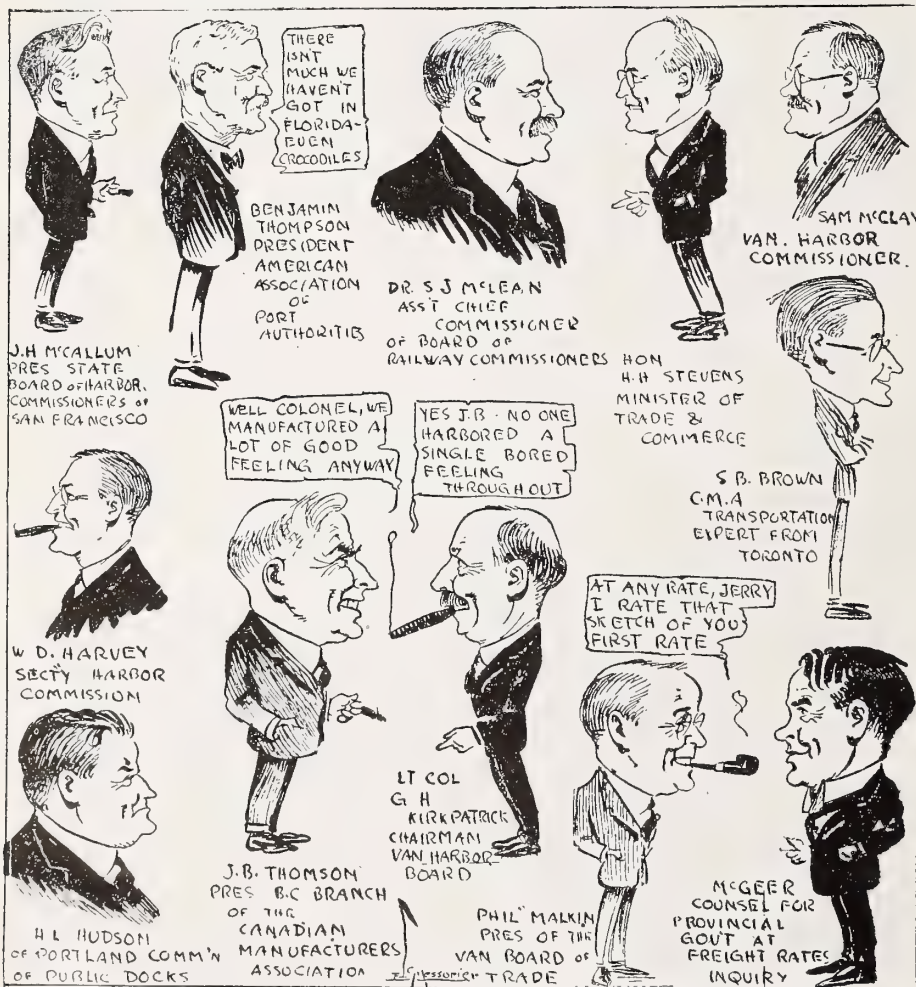
New Paint Company

After negotiations which have extended over the last three months, the principals of the Pacific Color Manufacturing Company have purchased the buildings and property of the Chilliwack Evaporator Company in Chilliwack, B.C. The deal assures another important industry for Chilliwack, as the Pacific Color Company has been organized to manufacture dyes and colors for paints and other industrial purposes by a new chemical process. The property which the new company has secured is eminently suited for industrial purposes having large buildings of solid construction, together with two and a half of land with railway trackage.

With large, roomy buildings that can easily be adapted to their new industrial purposes, and an admirable location for shipping facilities, the company intends to begin operations just as soon as the necessary alterations in the buildings can be made and the plant and materials secured.

Successful Season For Box Makers

The end of October saw the closing down of the box factories at Wynndel and Canyon City in the Crow's Nest, which plants cater principally to the requirements of the Creston fruit district. The production of apple boxes of both plants has been in the neighborhood of 100,000 and it is expected that when the final count is made it will be shown that the combined output of the two plants will be nearly 300,000 boxes and crates of all descriptions. This constitutes the largest season's run in the history of the box industry in the Creston district.



Port Authorities Visit Vancouver

Cartoonist of Vancouver Daily World pictures several of the chief personages present at dinner tendered by the Vancouver Harbour Commissioners and B. C. Division of the Canadian Manufacturers' Association to delegates to convention of American and Pacific Coast Associations of Port Authorities.

—Illustrations by Courtesy of Vancouver World.

News Relating to Export Trade

Published by Arrangement with
Canadian National Export Club

LATEST advices from Jamaica state that the Legislature has passed an amendment to the Income Tax Law to enable the Colony to assess persons and corporations residing abroad who derive profits from their operations in the Island.

The revision of the Jamaica Tariff by a Committee of the Legislature has been completed. In due course, the tariff will be presented to the Legislature for adoption. It provides for a 25 per cent Imperial Preference.

Commercial houses report that German traders, irrespective of existing Australian barriers, are making a keen effort to secure business. Their offers are temptingly low, some quotations being one-fourth of the prices at which British and Australian made goods are now being retailed at in Sydney and Melbourne.

Portable wooden houses and garages, as well as portable metal garages, are in demand in Spain.

The Portuguese market is reported to be under-stocked with cotton goods, machinery, locomotives and railway material.

The Guatemalan Government has established a central purchasing bureau through which all supplies required by the various departments and bureaux of the Republic will be purchased.

There are indications that the Canadian Pacific Railway will assist in the development of trade in the Caribbean. Two representatives of the Company are investigating the possibilities of opening a steamship service between Canada and Jamaica in February, and it is reported that they are thinking of providing a service throughout the West Indies at a latter date.

The Agent-General for British Columbia has secured for that Province, important contracts for structural timbers for Naval dockyards and for stage deals for which tenders were recently asked. The Director of Naval Contracts has also assured Mr. Wade that a preference will be accorded, as far as is practicable, to the products of the Dominion in any future contracts entered into by his Department.

Foreigners entering Argentina after October will require to have, in addition to documents already necessary, an identification card which can be obtained from the Argentine Consul in the respective countries.

The City Engineer of Auckland, New Zealand, forecasts the following requirements for the Electricity Scheme during the next two years:—meters, £10,000; sixty miles of reticulation, £30,000; sub-station, feeder extensions and switch gear, £26,000.

Contracts for plant and material are involved in the proposal to electrify the tramway system at Newcastle, New South Wales, for which a preliminary instalment of £120,000 is being put on the estimates for the next financial year.

A recent cable report from the Argentine states that general commodity markets continue unchanged. The cereal market is weak with small demand for export. The shipping market is the duller in a number of years. The wool market registered some important transactions this week with prices firm. Exports of meat have increased.

According to a report from Montreal, a large contract has been closed for the export of pulpwood from Canada to Holland, shipments to be made monthly at the rate of

600,000 cords per annum. The entire contract is for 6,000,000 cords, spread over a number of years.

The Government of Ontario has sent a fine consignment of cheese to compete at the forthcoming dairy show in London for the Hansen Challenge Trophy, awarded each year for the best colonial cheese, and is also competing in the colonial butter classes. Ontario apples will also compete at the Imperial Fruit Exhibition at the Crystal Palace.

A ready sale in Guatemala awaits such articles as deep bowls, stewpans, frypans, colanders, steam cookers and small cooking utensils. General ironmongery goods are also in demand, including brass and iron padlocks, hinges, springs and cutlery, such as penknives, rust-proof table knives, forks, spoons, scissors and razors.

Calcutta Corporation are experimenting with a conservancy lorry service. A trial is also being given to electric lorries. When the question between electric and petrol lorries is settled, a large number of lorries will be required by the Corporation.

A Reuter message from Bombay states that the proposed electrification of the suburban lines of the G. I. P. will require a large supply of electrical energy. It is proposed to inter-connect the Andhra Valley, the Tata Power and the Hydro-Electric companies to ensure the supply of power. The electrification of V. Terminus to Kurla will require nearly seventeen million units per annum, when extended to Thana, twenty-nine million units, and when extended to Kalyan, thirty-six million units.

Canadian Export Trade

The November monthly letter of the Royal Bank of Canada make the following analysis of our export trade:—Exports from the Dominion of Canada during the first five months of the present fiscal year are valued at 277 million dollars, as compared with 454 million dollars for the same period last year. This decline of 177 millions in value is an extremely heavy one, but the fact should not be overlooked that, in a time of rapidly shifting prices, volume of trade becomes the best criterion of a country's business activity. We have compiled, and give below, an index of the volume of Canadian exports of certain main commodities during the seven months, January to July, 1921:

	Jan.	Feb.	Mrh.	Ap.	May	June	July
Wheat	100	80	65	43	71	52	32
Other Grains.....	100	111	97	154	381	483	481
Flour.....	100	89	117	76	74	76	66
Animals Living.....	100	36	85	71	69	46	70
Meats.....	100	105	60	93	96	87	89
Wood, unman.'d.....	100	110	123	65	92	110	191
Pulp & Paper.....	100	87	132	73	92	84	116

For the sake of convenience, January is taken as 100. Wheat exports are low, as naturally the new crop had not commenced to come forward by July. Except for this, these figures tell a much less depressing story than the one indicated by statistics of value. They illustrate the fact that the staple commodities which constitute the bulk of Canadian exports enjoy a demand that is not subject to drastic fluctuations.

Hong Kong Needs Contractors' Equipment.

A report in the United States "Commerce Reports" intimates that the contract for the large reclamation project there has been awarded to the Chinese firm, Sang Lee & Co., 24 Gage Street, Hong Kong, the contract price being approximately 3,000,000 Mexican

dollars (1 Mexican dollar—\$0.574 at present exchange).

In connection with the above contract, Sang Lee & Co., will require five nonelectric locomotives, the height of which must not exceed 6 feet and which must be capable of hauling 25 loaded cars, each of which cars shall have a capacity of 3¼ cubic yards. They will also require 100 pairs of wheels and axles to be used in making the above cars. For track equipment they require 2½ miles of track, using 35-pound rails; 2½ miles of track using 28-pound rails; and a steam crane to lift 2 tons at a radius of approximately 10 feet minimum, 15 feet maximum. Orders for this equipment have not yet been placed. Manufacturers interested in supplying this equipment should cable directly to the firm named above.

Full particulars regarding the above project were given in the monthly report of Commerce and Industry for Hong Kong, dated April, 1921.

Lumber for Building in Japan

The demand for pine for building purposes in Japan appears to be on the increase. It is estimated, writes Trade Commissioner, H. A. Butts, that imports of this material will reach as high as 100,000 cubic feet this year. The building programs of the six large cities of Toyko, Osaka, Yokohama, Nagoya, Kyoto and Kobe for the next two years amount to 1,180,000,000 yen, according to present estimates. These programs include widening of streets, building of new dwelling houses, paving streets with wooden blocks, and the installation of sewerage systems. If these programs are carried out it will necessitate an enormous amount of lumber, much of which will undoubtedly be imported from the United States.

Value of Advertising in the Markets of the Far East

The Canadian Trade Commissioner in Japan in emphasizing the importance of advertising in the Far East writes as follows:

"The Japanese are an exceedingly artistic nation, and their attention is at once drawn to any advertisement which is such that it appeals to this artistic sense, which is indeed so strongly developed that any industrial product or article which may be brought to their attention in some journal, newspaper, magazine, poster, etc., by well-designed advertisement portraying the product will often be the means of arousing a desire to procure that article without delay. The more widely an article is advertised, the more strongly and urgently does the desire to possess it grow, as the Japanese loves to be considered progressive and 'wide-awake.'"

Concentrating Business

The Winnipeg Top and Trimming Company are at present erecting a new building at 780 Portage Avenue, Winnipeg, which they expect to occupy on November 1st. They have been carrying on business up to the present time at two different locations, one at 424 Graham Avenue and the other at the corner of Portage Avenue and Victor Street.

A new limited liability company is being organized with a paid-up capital of \$20,000 and the stock and good-will of the Auto Top and Supply Company, who have been doing business along the same lines, has been purchased. The personnel of the new company is composed of men who have spent their lifetime at this kind of work. They have all been residents of Winnipeg for the past fifteen years.

A "Made-in-Galt" exposition was held by the manufacturers of Galt during the week of November 12 to 19. Over sixty exhibits were included, a number of them actual working exhibits.

Transportation Department

Reduction in Transcontinental Rates, Telephone Increase Application and Other Transportation Matters of Interest

Transcontinental Rates.

The resumption of competition by the Panama Canal is forcing substantial reductions in rates to and from Eastern territory and Pacific Coast points.

Recognizing the effect of this competition, the United States carriers have made application to the Interstate Commerce Commission for the authority of the Commission to publish rates on an extensive list of commodities to Pacific Coast territory on a lower basis than apply to inter-mountain territory, alleging that the competition of domestic and foreign vessels through the canal makes this necessary if they are to continue to participate in transcontinental traffic.

If the application is granted, it will, generally speaking, have the effect of restoring the old system of "blanket rates" in practically all territory east of the Missouri River to Pacific Coast points, thus placing all manufacturers within that territory on an equal footing and restoring the conditions which obtained prior to 1917.

This application was heard in Chicago on November 11th. The Department is following the matter closely as the rates in Canada to and from the Pacific Coast bear a direct relationship to those in effect in the United States. Furthermore, if the United States carriers are successful in their application, it is possible that the Canadian lines will endeavor to return to their former practice of making rates from Eastern Canada to Pacific Coast by the addition of arbitraries to the rates from Chicago, which system of rate making prevailed until the present basis was agreed upon and which recognized the position held by the Association for years past namely that rates to and from Eastern Canada and the Pacific Coast should be no higher than rates to and from contiguous United States territory, especially when the traffic originating in the United States is carried through Canada.

Application of the Bell Telephone Company for an Increase in Tolls.

A preliminary hearing of this application was held in Ottawa on October 5th. As the authority of the Board of Railway Commissioners to proceed in the application was questioned in view of two appeals to the Privy Council against the former judgment which had not been disposed of at the time, this hearing was adjourned until October 11. In the interim the two appeals were referred back by the Privy Council to the Board to be dealt with in connection with the present application.

The applicants have not so far given any information to show their actual financial position or what additional revenue would be required to allow them the return on their invested capital which the Board, in their previous order, decided they should get. So far they have confined themselves to a statement that a large number of applications for service have been received which they are unable to supply, and that, unless large capital outlays are immediately arranged, the public service will be seriously interfered with.

The Montreal Branch have placed themselves on record as maintaining the position formerly taken; namely, that if the condition of the Bell Telephone Company, as developed at the hearings, justifies an increase, they are not opposed to the Board granting such an

increase as will enable them to earn sufficient income to allow a fair return upon the capital invested, and to furnish a satisfactory service to their subscribers in all sections of the country where they operate.

The Hamilton Branch opposed the application, and the Toronto Branch, although it did not have all the facts before it, expressed the view that, as the present application was filed within a very short period after the judgment in the former one, there was not sufficient time to determine whether or not the results obtained from the former judgment would be sufficient to meet the company's needs.

It was finally decided at the hearing on October 11th to adjourn until December 12th to allow counsel for different municipalities and organizations to secure such particulars and information from the Bell Telephone Company as are necessary to intelligently deal with the application.

Reductions in Rates on Grain and Grain Products

Reductions have recently been made by the Canadian carriers in the all rail export rates on grain and grain products from the head of the lakes and Georgian Bay ports to various North Atlantic ports of, generally speaking, 7½c and 5c respectively. These rates are published to expire on December 31st next unless sooner cancelled, changed or extended, the reduction being largely influenced by water competition and necessary to encourage the movement via rail.

The United States carriers have made similar reductions from Chicago and Mississippi River points on export traffic, and have also reduced domestic rates from C.F.A. territory to points east on the western termini of Trunk Line Association territory, viz., Buffalo and Pittsburg. Under the present adjustment, the domestic rate on grain from Chicago to Boston moving through Canada is reduced 4½c. but this reduction is not reflected in rates to points in Canada directly intermediate. Our information reveals that this is the result of action of the Canadian lines in refusing to join in a reduction to Canadian points owing to the tendency this would have to disturb the rate structure on domestic grain from Canadian points of origin; the present rates on domestic grain in Canada being the same as allowed under the last general increase. This matter has been energetically placed before the carriers by the General Manager with a view to securing equitable treatment in the interests of manufacturers in Canada.

Car Supplies

Statements received from the Railway Association of Canada for periods ending September 1st, September 15th, October 1st, October 14th, show the following results:

	Sept. 1st.	Sept. 15th	Oct. 1st.	Oct. 14th
Total cars on Canadian Lines.....	214,735	215,048	211,617	211,380
Allowance for Bad Order Cars,				
A.R.A. Basis.....	15,031	15,053	14,813	14,797
Actual Bad Order Cars.....	15,263	16,021	15,849	16,436
Excess Bad Order Cars over				
A.R.A. Allowance.....	232	968	1,036	1,639
Surplus cars in good order.....	28,339	16,475	15,141	15,911
Total Idle Cars	28,571	17,443	16,177	17,550

It will be noted that the surplus cars in good order on September 1st were 28,339. Within a period of 15 days this had declined to 16,475 and on October 1st, to 15,141. A slight increase in the surplus took place for the period ending October 14th. The bad order car situation continues to show, however quite an increase. On September 1st it was 232 and on October 14th it was 1,639. This of course is accounted for to some extent by curtailment in maintenance which the carriers have found necessary in order to assist in reducing costs of operations.

Better Protected Packing for Express Shipments During Cold Weather

Under date of November 1st the Express Traffic Association of Canada addressed a circular letter to the shipping public directing the attention of their patrons to the necessity of better protective packing for perishable commodities such as green or fresh fruits and vegetables, liquids and other goods susceptible to damage by frost, forwarded during the winter months.

It is particularly desired to impress on their patrons that, while express goods are invariably carried on passenger trains which are heated by steam or otherwise, they should not overlook the fact that the goods are hauled by wagons in the cities and towns, and are of necessity moved on station platform trucks between the trains and depots, where it is not always possible to furnish heated protection. In view of this the express carriers emphasize the importance of shippers providing suitable protective packing for perishable products, and to refrain from tendering for shipment such goods as are insufficiently packed to protect the contents from damage by frost.

It is hoped that in the mutual interests of the shippers and express companies that all members will co-operate with the express companies and take all reasonable precautions to protect such goods.

Agent at Shanghai

A. Brostedt, formerly General Freight Agent, Canadian National Railways at Vancouver, has been appointed General Traffic Agent with headquarters at Shanghai, China. He will have general supervision in China, Japan, Straits Settlements and the Philippines, of both freight and passenger traffic interests for Canadian National Railways. The appointment became effective November 1st. Mr. Brostedt recently made an extensive trip through Oriental countries on behalf of Canadian National Railways, and will return within the next few weeks to take up his headquarters at Shanghai.

New Pacific Service

The Yamashita Kisen Kaisha of Kobe, Japan, has drafted a plan for the inauguration of a triangular shipping line between Japan, Australia and North America, according to a report in the Vancouver World. This plan has long been considered by the company as a means of meeting the prevailing shipping depression and the proposed line is for a route not hitherto attempted by Japanese shipping companies. If a favorable decision is reached, by the directors, it is expected that the proposed service will be inaugurated this fall.

Tariff Department Bulletin

Record of recent Board of Customs Decisions, Departmental Rulings, Excise Tax Rulings and other useful information.

Amended Invoice Form For Canadian Customs Purposes

Members have been advised (vide Circular 329) that an amended invoice is to be used for importations into Canada, and that the Department of Customs and Excise desires that this amended form shall be in use uniformly by January 1st, 1922.

The only change in the old invoice form is the inclusion of the following addition in the certificate which the exporter is required to place on invoices covering shipments to Canada, viz:

"And that such fair market value is not lower than the wholesale price of the said goods at the said time and place; and that in the case of new or unused goods, such fair market value is not less than the actual cost of production of similar goods at said time and place, plus a reasonable profit thereon."

It should be clearly understood that this is the only change in the invoice forms now in use. Exporters who have on hand a large supply of the present forms may continue to use same up by typing the wording elsewhere on the invoice and making formal signature thereto, as say:

"The fair market value certified on this invoice is not lower than the wholesale price of the said goods at the said time and place; and in the case of new or unused goods such fair market value is not less than the actual cost of production of similar goods at said time and place plus a reasonable profit thereon."

On invoices for entry of goods under treaty rates, for entry under the British Preferential Tariff and for entry of goods shipped on consignment without sale by the exporter prior to shipment, the same additional clause is to be added to the certificate which the exporter signs.

The amended invoice form is designed to ensure more uniform and accurate assessment of Customs import charges.

Sample copies of the new invoice forms may be obtained direct from the Commissioner of Customs and Excise, Ottawa, for the information of concerns abroad from whom you purchase goods; also, they may be obtained by you from the Tariff Department of the Association.

Certificate of Origin for British West Indies

On page 56 of the October number of INDUSTRIAL CANADA, in an article entitled—"The British West Indies as a Market for Canadian manufactured Products" there appeared a form of certificate of origin which the article stated had been agreed upon by all the Colonies. This form of certificate is the one which was in use under the 1912 Trade Agreement and was discontinued by most, if not all, of the Colonies following the ratification of the 1920 Agreement.

The Tariff Department will be glad to advise intending exporters as to the correct form of certificate which should be endorsed on invoices covering shipments to the West Indies. It is hoped that all of the Colonies will eventually adopt the uniform certificate, and when this has been done the form will be published in INDUSTRIAL CANADA.

United States Emergency Tariff

The Fordney Emergency Tariff which took effect on the 28th of May last originally provided that it should remain in force for a period of six months, but, according to information received, it is expected that Con-

gress will extend the provisions of the Emergency Tariff until such time as the Permanent Tariff Schedules in the proposed new tariff become effective.

The House of Representatives voted on October 18th to extend the provisions of the Emergency Tariff Law until February 1st, 1922. The question has since been under consideration by the Senate, and on the 8th of November the Senate passed a resolution which provides that the provisions of the Emergency Tariff shall remain in force until otherwise provided by law.

Board of Customs Decisions

Declared that the "Martin" Ditcher, Grader and Terracer, is properly dutiable under tariff item 454 at the rate of 30% under the general tariff.

Declared that Sheet Steel "T" Beams, or Lumber Sections (so-called) constructed of two pieces of hot rolled sheet steel shaped into channel form and electrically welded together, are properly dutiable under tariff item 391 at the rate of 35% under the general tariff.

Declared that "Nulomoline" is dutiable under tariff item 141 at the rate of 1/2 cent per pound and 35%, under the general tariff.

Declared that staves, or stave material of wood (other than oak), listed or jointed, are dutiable under tariff item 506, at the rate of 25% under the general tariff, effective on and after 11th of October, 1921. Super-seding Board of Customs decision of 12th of June, 1917, Appraisers' Bulletin No. 1529.

Declared that drawback may not be allowed on brass or copper scrap or waste exported after 14th November, 1921, when the prime product is not exported.

Departmental Rulings

Ruled that small steel rollers for the manufacture of roller bearings may be admitted under tariff item 491, at the rate of 10% under the general tariff, until otherwise determined.

Sales Tax Decisions

Declared that oysters in bulk, in shell or shelled, are exempt from Sales Tax.

The Department of Customs and Excise has ruled that sales to the Quebec Liquor Commission are subject to sales tax, whether the goods are purchased for its own use or for resale. Our circular No. 330, dated October 13th, page 2, should be corrected accordingly.

Important Drawback Ruling

Attention is directed to the ruling of the Board of Customs, noted above, that brass or copper scrap or waste exported after November 14th, 1921 will not be subject to drawback unless the prime product manufactured from the imported brass or copper is also exported.

Toronto Branch Hear About Civic Hypnotism

A GENERAL meeting of the Toronto Branch C.M.A., was held in the Board of Trade Luncheon Club, on October 25th, to hear an address by Dr. Horace L. Brittain, Director, Bureau of Municipal Research, on "CIVIC HYPNOTISM."

In the absence, through indisposition, of R. H. Easson, chairman of the Branch, W. C. Coulter, chairman of the Ontario Division, presided, being accompanied at the head of the table by Dr. L. H. Brittain, W. H. Alderson, President, Board of Trade, C. H. Marriott, Ex-President the Board of Trade, D. A. Cameron, Bank of Commerce, John O'Neill, M.P.P., etc.

Dr. Brittain unfolded the parable of the hypnotized taxpayer. Lkening the average citizen to the more or less willing subject of a stage seance, the Director of the Bureau of Municipal Research explained the causes of his aberration, and pointed out the remedies wherewith he might free himself of the spell so firmly placed upon him by the hypnotists,—"city fathers" and others.

Translation of citizens into a state of hypnosis, Dr. Brittain said, was as essential to the painless extraction of taxes as was gas to the painless removal of teeth, and equally effective. Many forms of hypnosis, or trance, were at the disposal of the master-minds who removed the mental responsibilities of their subjects, and all, in these days of tax-extortion, were widely applied. Chief among these hypnoses were those of the tax-rate figure, the assessment graph, "uncontrollable" expenditures, local improvement illusions and tax exemption myths. Relief for the sufferers, he said, lay in wider information, deeper education in elementals, and a strong public opinion in favor of better things.

Need of Good Citizenship

"At the bottom of it all is a realization of the need of good citizenship among us, and for that we must have knowledge—information," declared the speaker. "Where can we get it? Well, thank God for the news-

papers. My experience with them is that if you give the newspapers something worth while, they'll use it. They'll give it news value,—if it's worth it."

Dealing with what he called "tax-rate hypnosis", Dr. Brittain said that, in watching closely the rate in mills, ratepayers overlooked entirely the amount of taxes, much to the gratification of those superintending expenditures. In the period 1895 to 1921, he declared, assessments in Toronto had increased 58 per cent., and the tax rate 103 per cent., whereas the amount of taxes had leaped up by 239 per cent. People were so intent upon tax rate that they ignored gross expenditures altogether.

"Tax rate is one of the least important things in civic administration," said the speaker. "As long as assessment is just, amount of assessment has absolutely nothing to do with per capita expenditures. Expenditure in Toronto is as big as it is because we haven't been looking at it. The appointment of a man like Thomas Bradshaw as Finance Commissioner is not going to get us anywhere, unless we have good citizens behind him."

Vigorous applause greeted Dr. Brittain's statement that there should be in Canada only one income tax, and that a national one. In some provinces there were being collected three distinct income taxes, at a cost of three overhead systems, he said. This was grossly inexcusable and uneconomical. The business tax, he continued, should be based upon ability of the business to pay and should show no relation whatever to the realty assessment, as at present.

No "Uncontrollable" Expenditures

The second hypnosis, so-called uncontrollable expenditures, Dr. Brittain dealt with briefly. There were, he said, no such expenditures as uncontrollable ones, a fact illustrated by Thos. Bradshaw when, as Finance Commissioner, he showed that debt charges were controllable. The speaker

said that he knew of no better example, of good financing than Mr. Bradshaw's action in introducing the installment bond issue on account of civic war expenditures.

Local improvements generally were arranged for on the basis of "something-for-nothing"; a fallacious theory, but one held by humanity in common. Dr. Brittain expressed his full concurrence in Finance Commissioner Ross' opinion that in outlying districts all local improvements should be paid for by the people directly in benefit therefrom.

"I believe churches should be taxed," he continued, amid loud applause. "This is only in line with the good old doctrine of the separation of Church and State. Also public buildings. If a new postoffice is put in Toronto, and we really need it, why should the Dominion of Canada be free from taxation upon it? Schools of a special character, for certain classes, also should be taxed. And, in simple justice, all governmentally-owned trading operations, whether national, provincial or civic, should pay taxes. In a decade, in Toronto, assessment has increased 98 per cent., but tax-exemptions have increased by 113 per cent. Is that progress in the right direction?"

"Common excuses for lack of interest on our part are 'Politics is rotten' and a very common one, 'What's the use?' I believe that every member of Council, every member of Parliament—Provincial, Dominion, Imperial—is just as good as the average citizen whom he represents. I often am amazed that democratic countries on this continent get as good government as they do."

Abolish Ward System

Dr. Brittain declared abolition of the ward system and the committee system to be essential to civic progress in Toronto. The former, he said, should go root and branch; the latter should resolve itself into one executive committee, responsible to Council.

The address was received with deep interest by the meeting and on motion by John O'Neill, M.P.P. seconded by Past-President, J. S. McKinnon, a hearty vote of thanks was tendered to Dr. Brittain for his address.

Roger W. Babson Speaks at Luncheon

A quarterly luncheon meeting of Quebec Division was held at the Windsor Hotel, Montreal, on November 3, with Roger W. Babson, founder and head of the Babson Statistical Organization, Wellesley Hills, Mass., as guest of honor. There was a large attendance. B. W. Coghlin, chairman, Montreal Branch, presided, and seated at the head table were Lord Shaughnessy, Sir Frederick Williams-Taylor, Sir Arthur Currie, Sir Montagu Allan, Sir Herbert Holt, Sir Charles Gordon, W. M. Birks, representing the Montreal Board of Trade, A. C. Pratt, General Manager of Molsons Bank, Mayor Martin, Alfred Lambert, C. Howard Smith, T. P. Howard, F. G. Daniels, and Howard Kelley, president of the Grand Trunk Railway System.

Mr. Babson spoke on the "Business Outlook for 1922." In explanation of the downward plunge in industry and the general effect on business he cited twelve periods in each business cycle. By the study of these he believes it is possible to forecast with certainty what any industry or section will next enjoy or suffer in a business way. His summary of the situation, past, present and future, accompanied by his opinion that the sixth period is at hand, is as follows:—

1—Every cycle begins at the peak of prosperity, accompanied by large profits and high wages.

2—This is followed by a period of inefficiency, accompanied by declining bond prices.

3—Next is a period of dishonesty and profiteering, accompanied by declining stock prices.

4—Then comes the periodical crime wave with declining commodity prices.

5—Lack of confidence is then everywhere apparent, which results in general unemployment.

6—People must then cut down living expenses, families double up, all of which results in declining real estate prices. This is the end of the general decline and improvement usually begins at this point of the cycle.

7—Thrift becomes more evident and this results in declining interest rates, allowing banks to loan money to start new building and again set the wheels of industry moving.

8—The unemployment period always results in greater efficiency, which is evident at this point in the cycle. Increasing bond prices are noticeable at this time.

9—People become more honest, fairer prices are asked by both merchants and labor. We get a dollar in value whether buying merchandise or labor, which we did not get during the period of prosperity.

10—Renewed religious interest is now evident, resulting in restored confidence, greater buying with the strengthening of commodity prices.

11—This followed by great activity in all lines, with labor fully employed.

12—The cycle has been completed; extravagance and waste are again in evidence with high money rates.

Order of Depression

Mr. Babson also showed by charts that all industries are not hit at the same time but rather in the following order: Rugs, jewellery and other things purchased by the wealthy; the silk industry and expensive household furnishings. In a time of business depression, the wealthy are the first to stop buying and the masses are the last to stop buying; the leather industry has probably suffered the most of any. Many classes of leather are selling for less than they sold for before the war. Some grades are selling lower than they have sold for thirty years; the boot and shoe industry, centered in New England, was hit very hard last year, especially the manufacturers of men's shoes. The buyers' strike really started with the boot and shoe industry. Directly after people stopped buying shoes, they began to economize on all kinds of woolen and cotton goods used in their homes and business generally; the first merchant to feel the effects of the present depression was the retail clothing dealer. The men's clothing industry was hit a very hard blow early in the depression and has not yet recovered. If, however, we have a cold winter ahead of us, there will very likely be a clothing shortage. The building of factories and office buildings came to an abrupt stop last fall. For some time there has been a shortage in homes, but not till a few months ago was building in all lines greatly contracted.

A year ago wheat was selling at \$2.50 a bushel, corn at \$1.00 a bushel, and other products of the farm at correspondingly high prices. All at once the crash came and today the farmer is the bluest man in the country. Farm products were the eighth great industry to be hit and will be the eighth to recover. The next industry to be hit was iron and steel. The prices of steel products were one of the last to decline. Steel prices have not yet hit bottom. There is no immediate sign of recovery in the steel industry; machine tools and allied interests are at a very low ebb, with no prospects of an immediate recovery. Even worse than the machinery products is the shipping industry. There are no hopes at present for a revival in shipping for sometime to come.

Shipping rates must be lower and the ship-building industry is absolutely dead and the twelfth leading industry has not been hit. This includes the semi-luxuries which are purchased by the masses, best illustrated by tobacco in the case of men, and wearing apparel in the case of women.

"We hope that there will be a turn in the tide next year, but there is no sign of it at present. Of course it is wrong to treat all industries and all sections of the country as a unit. The industries and the sections of the country which were hit first will be the first to recover, but those industries and sections which were last to be hit will be the last to recover. Taking all industries and all sections and averaging them up, we hope the corner in the Babson chart cycle will turn sometime next year. On the other hand, for years to come we expect to see prices find new low points in each depression, while each high point of the periods of prosperity will be lower than the one preceding. This is very important for younger citizens to keep in mind.

"The great cycles in commodity prices run about fifty years. This country has experienced three distinct such cycles. In these cycles commodity prices go up about twenty years and then decline for about thirty years. This means that a great proportion of America's business men have thus far experienced only the upward movement. The man who has been in business less than twenty years knows absolutely nothing of the movement that this country is going to experience during the next ten to thirty years. It will be a new world to him and a new language to him. He will be obliged to do business under conditions that he never knew were possible."

Insurance Exchanges Taking Canadian Licenses

It is understood that the New York Reciprocal Underwriters and the Individual Underwriters of New York, two of the leading fire inter-insurance Exchanges of the United States, are about to become licensed in Canada, with head-office at Montreal.

The Individual Underwriters is the oldest organization of its kind, having been established in 1831. The New York Reciprocal began business in 1891. Both Exchanges are under the management of Mr. Ernest W. Brown, formerly vice-president and secretary of two of the senior Mill Mutuals.

Only preferred risks are accepted, and are subject to rigid inspections, which has resulted in the lowest known loss ratios and insurance costs. The practice is to write the insurance at approximately the tariff rates, and during the past ten years there has been returned to the subscribers annually as savings, an average of about 80% and 70% of the premiums at Reciprocal and Individuals respectively. The average savings for the past twenty years have been practically as favorable.

Each of the above groups of Underwriters have for many years included many prominent Canadian concerns. Their activity in Canada has been restricted because of not having been licensed which is due they claim to the burdensome conditions imposed by the statutes which were designed for the control of stock companies, and cannot be applied equitably to reciprocal or mutual organizations. While the statutory conditions referred to have not changed, an adjustment of the situation as between subscribers has been satisfactorily arranged.

Canada showed profit by the wholesome competition offered by financially strong organizations such as the above, as well as from the reduction in fire waste contingent upon their fire prevention work.

The Montreal office is to be in charge of Mr. Lindsay M. Donaldson who has been associated with Mr. Brown for several years.

A Defence of the Canadian Paint Industry

Refutation of Attack made by Hon. T. A. Crerar on
This Industry—Its Share in Development of Canada

SPEAKING at Seaforth, Ont. on the 20th inst., Mr. Crerar, the leader of the Progressive Party, stated that as a result of the 30% tariff on paints, The Sherwin-Williams Co. among others, was able to pay dividends on watered capitalization, taking the money out of the pockets of the Canadian people to do so.

As a matter of fact, at no time in recent years have paint manufacturers taken into consideration the 30% duty in fixing prices. The basis of paint prices has always been the cost of raw materials, plus a fair margin of profit, and there have been many times when American paint—even if it has been allowed to enter duty free—could not have been sold on the Canadian market lower than Canadian made goods, taking into consideration the difference in value of the Imperial gallon and United States Wine Measure. For a period of time, year in and year out, the average price of paint made in Canada and sold to the Canadian consumer compares favorably with prices charged to the American consumer by the American manufacturers. Sometimes on a falling market prices are reduced sooner in the United States than in Canada—That is due entirely to the fact that reactions in the American market are, as is well known, more rapid than in Canada, but the difference is not one of long duration.

Growth of the Industry

Let us see what the paint company to which Mr. Crerar refers—with that half knowledge unfortunately so characteristic of many politicians—has done in the upbuilding of industry in Canada, thus fostering the prosperity of the Canadian people. The Sherwin-Williams Co. dates its beginnings many years before the time to which Mr. Crerar refers as the date of the merger. Fifty years ago pioneers of the company in Canada began their work, and it was their courageous efforts from small beginnings in the early days of business in this country, that built up a valuable trade so that the actual worth of the companies incorporated in the merger, their trade marks, formulae, and the good-will which was the result of so many years of effort, represented a real value, much higher than the bare dollars and cents to which Mr. Crerar's practical mind would have it reduced. When the merger was made in 1911, the facilities thus centralized were developed to their utmost. Economies were effected in the purchase of raw materials, in the process of manufacture, and in methods of distribution, which would have been impossible to the companies as individuals,—and as a result of these economies, the paint consumer today is buying his goods not for more than he would be if the merger had never taken place, but for considerably less, notwithstanding Mr. Crerar's fallacious generalization that combines invariably increase prices. This particular combine at least, has by economical operation, actually saved money to the Canadian consumer of paints and varnishes.

Besides this, the company has had no small share in developing the natural resources of the country, to which Mr. Crerar devotes so much solicitous attention. It operates Oxide Mines, the product of which is not only used in this country, but is exported to, and has a ready sale in the United States. It uses a large proportion of the lead output of British Columbia mines in the corroding of white lead. In addition, the Sherwin-

Williams Co. uses every year, almost one-fifth of the entire flaxseed crop of the Canadian Northwest, thus contributing not a little to the well being of that other combine over whose destiny Mr. Crerar presided so profitably and so long, and upon whose success his political fortune has been founded.

The company in its nine factories and as many warehouses employs two thousand five hundred people, so that at least ten thousand Canadians owe their livelihood directly to its operation. The entire output of the paint and varnish industry for the year 1920 is estimated at \$25,000,000. The capital invested in the industry in 1918 was estimated at \$15,784,610 and has been considerably increased since then. Would Mr. Crerar prefer to have this capital invested in some other country? Would he prefer to have this \$25,000,000 sent in Canadian money to some foreign country at a high rate of exchange to purchase foreign made products for Canadian consumers. The entire argument of Mr. Crerar is so fallacious that it collapses upon very slight examination. He appeals to business men to judge of the soundness and of the legitimacy of the mergers to which he objects. Every business man knows they are absolutely sound, they are absolutely legitimate, and they are general over the entire world. The elements of economics—if he knows them—should teach Mr. Crerar better than this. Big business is not the foe of economy, but rather its fostering spirit, because economy of operation at a fair profit is the very foundation of good business.

The trouble is with the politicians. They know better, but they have a purpose in not always saying what they know, and in many cases saying things which they do not know. There can be no question of the benefits which this country derives from the operation of the paint industry, any less than from the other great industries which Mr. Crerar with ulterior political motives sees fit to assail. The intelligent citizens of Canada are too well informed to be misled by half truths and misrepresentations. They know—just as Mr. Crerar at the back of his mind knows all the while—that the welfare of Canada is not promoted, and will never be promoted, by arousing mistrust,—each of the other, in the minds of the manufacturing population, the laborer and the agriculturist, each of which has his share to perform in the development of Canadian interests, and it ill behooves those who set themselves up as leaders of the people to instil, and to cultivate, such mistrust. If the misrepresentation is the result of ignorance, that lack of knowledge is inexcusable; if it is wilful, it is a direct betrayal of public confidence.

Companies are Independent

Mr. Crerar says as well, that as a result of these combines and mergers, "it is impossible for any little paint company to start up, because it will be throttled in order that the opposition may proceed to exploit the Canadian people." The facts just cited carry their own refutation of the charge of exploitation on the part of the paint industry. The merger to which Mr. Crerar refers is not a trust: they do not fix paint prices. There are a score of other large paint manufacturing companies in Canada, each of which is absolutely independent, and is operating on an independent basis. Competition is keen and fair, and on a competitive basis of this kind, the consumer is always protected,

and in spite of all that Mr. Crerar can say, the consumer is well aware of this protection. In addition there are thirty more of these small "throttled" companies operating in Canada at the present time, at least half of which have been formed since 1911, and all of them are carrying on prosperously under the very shadow of the imaginary octopus which Mr. Crerar's politically excited brain has conjured up for the bewilderment of the people whom he aspires to guide.

Hamilton Purchasing Agents Elect New Officers

At the annual meeting of the Hamilton Purchasing Agents' Association held in the Connaught hotel on November 2nd, the following officers for the ensuing year were elected; R. F. Simpson, president; W. B. Anstey, vice-president; W. N. Herod, secretary; F. E. Regan, treasurer. Executive committee—C. A. Ogilvie, R. F. Simpson, J. B. Griffith, W. N. Herod, Major B. C. Ball, F. E. Regan. Representatives to Canadian association at Montreal—R. F. Simpson and C. A. Ogilvie. In consideration of the fact that a large number of the members of the local association are representatives of out-of-town manufacturing concerns, it was decided to change the name of the Association to the Purchasing Agents' Association of Hamilton District.

R. F. Simpson, the newly-elected president, who was one of the delegates to the National Purchasing Agents' association convention held at Indianapolis last month, read the report of the delegates, which contained an immense amount of valuable information for the local association.

It was decided to change the time of meeting of the association to the first Wednesday of each month at 6 p.m.

Filling Export Orders for Oil Engines

The Ker & Goodwin Machinery Company, Limited, are building up an export trade in the oil engines which they are manufacturing. Repeat orders for them have been received from France and shipments have recently been made to the British West Indies and to South America. The engines are also in use throughout the Dominion. The engine is of the semi-Diesel type and is purely an oil-burning engine, developing a dependable power at a great saving in fuel cost.

Change in Management

A. E. McMaster, secretary-treasurer of the Whalen Pulp & Paper Company, has resigned his position with that company for the purpose of accepting the position of resident manager of the Powell River Company at Powell River, B.C. Other changes are reported to be pending at the Powell River plant, but the local office, outside of confirming the above appointment, refused to discuss the other alterations.

Mr. McMaster has been three years with the Whalen Company and has made many friends in the city, where at various times he has bridged over periods of several months at a time between managers leaving and taking office.

T. W. McGarry, president and general manager of the Whalen Company, has left for the East and upon his return to the coast early in November, Mr. McMaster will leave for his new position.

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by direct, simple mechanical means make it easy to eliminate the destroying Time Wastes from any business.

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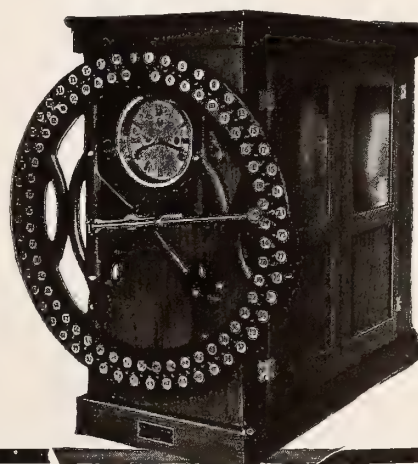
eliminate 90 per cent of the clerical work and expense connected with timekeeping and payroll computing, and at the same time give the protection of mechanical reliability.

They keep costly errors out of the payroll. They make punctuality a habit. They are correct to the minute, complete, impartial, economical. They soon pay for themselves in any business.

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Below—the International Dial Recorder which produces the records.



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Pig Iron and Ferro-Alloys

The Mining Branch of the Dominion Bureau of Statistics reports that the production of pig iron and ferro-alloys in Canada during the month of September showed a slight decline from the amount reported for the preceding month. The output of pig iron during September amounted to a total of 43,709 long tons as compared with 50,156 tons in August. The whole of the decline was in the output of basic pig iron made by firms for their own use, the quantity reported for this purpose being 38,590 tons, a decline of slightly more than 8,000 tons from the preceding month. Production of basic iron for sale was small, but 409 tons was produced for this purpose. Foundry iron production for sale rose to 4,541 tons as compared with 1,785 tons in August. No malleable iron was made during the month. Electric iron remained about the same at 103 tons.

Ferro-alloys produced during the month amounted to a total of 914 tons all of which was ferro-silicon made in electric furnaces and produced by makers for direct sale. The production of ferro-silicon during September was therefore about 50 tons less than during the preceding month, and owing to the fact that no spiegeleisen was made, in September, the total production of ferro-alloys shows a very marked decrease from the August figures. There were, therefore, five furnaces operating at the close of the month, namely: two at Sault Ste Marie, one at Hamilton, and two at Sydney. This leaves fifteen furnaces idle throughout the month.

The total output of pig iron during the nine months ending September, amounted to 457,157 tons, or slightly over 63% of the amount produced during the same period in 1920. The production for the half year amounted to 69% of the total for the same period in 1920.

The past three months have been very quiet in the iron trade, but there has been a gradual improvement in the steel industry of the United States during the past two months, and as the trend of Canadian output parallels that of the United States, it is probable that a gradual improvement will be noted during the closing months of the year.



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To the user this means long life, durability (freedom from annoying breakdowns) in his chains—whether in elevating, conveying or power transmission. That is why many experienced users always specify Link-Belt Chains.

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Building Conditions

Slight Decrease Reported in Construction Activity during Month of October

Construction activity in October, according to figures published by MacLean Building Reports, Limited, amounted to \$18,997,200, compared with \$19,565,700 in September, and \$18,169,500 in October, 1920. The totals for the different Provinces are as follows:

	No. of Projects	Value
Ontario.....	961	\$ 7,888,300
Quebec.....	488	6,473,800
British Columbia.....	229	2,155,100
Alberta.....	71	879,100
Manitoba.....	135	586,800
Saskatchewan.....	70	471,200
Nova Scotia.....	45	368,200
New Brunswick.....	21	153,700
Prince Edward Island.....	6	21,000
Total for Dominion.....	2,026	\$18,997,200

During October the volume of contemplated building held up surprisingly well. It was to be expected that seasonal influences would cause some decrease, so that a drop of \$44,195,000 from September was not unexpected. The total volume of contemplated new construction work in Canada reported during the month was \$19,061,000, compared with \$23,256,400 in September. The figures in detail are as follows:—

	No. of Projects	Value
Ontario.....	278	\$ 9,503,400
Western Provinces.....	84	4,906,500
Quebec.....	297	4,391,100
Maritime Provinces.....	17	260,000
Total for Dominion.....	676	\$19,061,000

The wholesale price index number of 48 building materials has declined 30.3 per cent., from the high point of May, 1920, which 183.8 per cent, above 1913 costs. Current prices, compared with 1913 costs, are now 46.8 per cent. lower than the peak prices of May, 1920, and have apparently reached the bottom for this movement. Outside of possible small declines due to probable freight rate reductions, building material prices should tend to hold steady

or even show some upward movement by the beginning of the next building year.

Steel Ingots and Castings

September Output of Open Hearth Ingots Considerably Lower than in August

Reflecting the low output of pig iron during September, the production of steel ingots and castings declined from 72,023 tons in the preceding month to 56,447 long tons in the month now under review. The whole of this decline was in the output of basic, open hearth steel ingots, production of bessemer ingots and electric steel remaining at about the same level as during August.

Basic open hearth castings showed a small improvement rising from 770 tons in August to 853 tons in September. Bessemer castings were about the same at 140 tons, while electric steel castings rose slightly from 812 tons to 975 tons. Of the steel ingots and castings produced during the month, 54,754 tons was made by firms for their own further use and 1,692 tons was produced for sale. The latter figure shows an improvement of about 300 tons from the amount reported for the preceding month.

The total output of steel ingots and castings for the nine months ending September amounted to 477,588 long tons as compared with 845,000 tons during the first three-quarters of 1920. The output for this year, therefore, equal to about 57% of the quantity made in the same time last year.

During the nine months, the output of steel ingots totalled 459,960 long tons while steel castings amounted to 17,628 long tons. Makers produced for their own consumption 459,249 long tons of steel ingots of which 457,358 tons was basic open hearth steel, the balance being electric, acid open hearth or bessemer product. During the same time, 3,423 tons of castings was made and used, while a total of 14,205 tons of direct steel castings was produced for sale. Of this latter amount, 10,890 tons was made in electric furnaces, the balance being made by basic open hearth, bessemer or acid, open hearth process.

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Shipman's Motto Cards have just that little thought—"Am I or Am I Not"?

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JOHN G. SHEDD
PRESIDENT

October 28th, 1921

Gentlemen:

I have been very much impressed by your poster "The Dragon". It is very timely and carries a multitude of truths in a nutshell.

I should like to have you send me two hundred additional copies for distribution among our people, and shall be glad to pay any expense. If occasion arises, I shall be pleased to reciprocate.

Yours very truly,

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Deaths Among Prominent Manufacturers

W. F. Bullen

Founder of Bullen and Company, Victoria, Dies at Age of Sixty-three

The Province of British Columbia lost one of her most prominent pioneer industrial leaders by the death of William Fitzherbert Bullen, which occurred on October 2nd. As founder and head of Bullen & Company and afterwards partner with G. G. Bushby in the B. C. Marine Railways Company at Esquimalt and Vancouver, he built many of the Canadian Pacific coast service boats.

Mr. Bullen was born near London, Ontario, in 1857. He went to Victoria in 1878 and was associated with the Albion Iron Works there until 1893, in which year he first became interested in steamship enterprises. He was a director of the B. C. Salvage Company, which is believed to be the fourth largest salvage firm in the world. He was 63 years old.

Frederic Nicholls

Former President of Canadian General Electric Company, Limited, Dies in Toronto

The death occurred in Toronto on October 25th of Senator Frederic Nicholls, who for many years had been prominent in the industrial life of the city and Dominion. Born in England in 1856, he received his training as an electrical engineer in Germany and came to Canada in 1874. In this country his early associations were with the Canadian Manufacturers' Association of which he became the secretary. He also founded the *Canadian Manufacturer* which for some time was the official organ of the C. M. A. In recognition of his journalistic ability he was elected president of the Toronto Press Club in 1890.

In 1888 his career as an electrical magnate commenced when he brought about the amalgamation of four companies into the Toronto Construction Company, which later became the Canadian General Electric Company, Limited. Until last March he was president and general manager of this company. On his resignation to become chairman of the board of directors he was presented with 2,400 shares in the company, valued at about a third of a million dollars, as a mark of appreciation for his services during the past 33 years.

In public life Senator Nicholls was an energetic worker. During the war he was on the executive of the Canadian Patriotic Fund, vice-president and chairman of the Executive Committee of the Toronto Red Cross Society and president of the Toronto Municipal Loan Association. In 1914 he was gazetted an honorary lieutenant-colonel, and in 1917 he was raised to the Senate.

E. W. B. Snider

Pioneer Miller of Waterloo County Dies at Kitchener in His Eightieth Year

One of the pioneer millers of Waterloo County, Ontario, Elias W. B. Snider, died at Kitchener in his eightieth year on October 15th, after a few weeks' illness. Mr. Snider was a member of the Ontario Legislature from 1881 to 1894, and a candidate for the Federal House in 1896, when he was defeated by J. E. Seagram.

His business career dates from 1865 when he took over the German Mills on the death of his father. In 1871 he purchased the St. Jacob's Mill which he operated until about five years ago. He was also interested in flour mills, in New Dundee and Kitchener. He was the first to introduce the roller system of making flour into Waterloo County.

Besides his milling interests, Mr. Snider at the time of his death was connected with the Waterloo Manufacturing Company, makers of threshing machines, and was president of the Anthes Manufacturing Company, Limited, Toronto.



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"We are very much pleased with the 30,000 gallon tank erected for us during 1920, in connection with our automatic sprinkler installation.

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Toronto Standard Sprinkler Tanks are made from exceptionally fine grades of Tank stocks—**air dried** to give them superior lasting qualities. They can be supplied in B. C. Fir, Gulf Red Cypress

and Redwood. Consult our Engineering department regarding any installations you are contemplating, or ask for our free illustrated booklet on Toronto Tanks.

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REVOLVING DOORS



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Stormproof and weatherproof.

We make these in automatic collapsible panic proof type; also the Rigid Brace Arm Type.

Our automatic collapsible type of door has the wings hung independently of each other on a central shaft and the wings are held together by flexible cables. Its safety feature lies in the fact that the revolving wings are so arranged that by the application of pressure to any part of the revolving structure slightly more than is necessary to revolve the door, it will instantly and automatically collapse and fold outwardly, leaving a free passage-way.

Our Rigid Brace Arm type has the wings held

together in position by braces. The wings are collapsible only by pressing a spring when it is desired to have the doors open in the middle or pushed to one side for a wide open passage-way. They are collapsible as to folding wings, but do not automatically collapse.

We make them in any size with three, four or six wings. The hardware is bronze, and we finish them in any woodwork desired—mahogany, oak, oak-veneer, bronze covered or copper covered. Send us particulars and we will be pleased to quote interesting prices and our goods will entirely satisfy. We have a long list of satisfied customers. Let us hear from you.

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James Grand

President of Grand & Toy, Limited, Stationers, Dies at Toronto.

On November 7th, at his home in Toronto, James Grand, one of the older generations of Toronto business men passed away. Mr. Grand was born in 1857 and while still a youth entered the stationery trade. In 1882 he formed a partnership with Samuel Toy and as Grand & Toy, Limited, the firm became one of the most important in their line. Mr. Grand was prominent in Toronto commercial circles and had been a member of the C. M. A. for several years.

Buying Ores Again

Consolidated Mining and Smelting Co., Come into the Market For Lead, Zinc, Copper and Silver Ores

The fact that the Consolidated Mining & Smelting Company is once again in the market for the purchase of lead, zinc, copper and silver ores is one of the most important events of the year, writes F. H. Mason, in the *Vancouver World*. Since the commencement of the year the company would give only warehouse receipts for the metal contents of custom ores that it treated, and the result has been the almost complete closing down of productive mining in the Kootenays. The company was drawing nearly all its lead and zinc ores from one mine, and if anything had happened to that one mine there would have been no lead or zinc ore obtainable to feed the Trail smelter. Just about two years ago, a strike took place at the Sullivan mine, and the Consolidated Company was glad enough to go around and scrape up every bit of available ore and concentrate from the independent mine owners. Had another strike occurred this fall, no ore would have been available.

Whether the entry of the Federal Mining & Smelting Company into the Kootenay field was the cause of the change of policy or not is not known. Be that as it may, the Consolidated requested the independent mine owners to meet its officials at Nelson to discuss clauses for a new smelting schedule, and a thoroughly representative meeting was the result. The independent owners were

represented by Clarence Cunningham, S. S. Fowler, W. E. Zwicky, R. Bruce, R. V. Grimes, J. B. and O. V. White, J. Anderson, J. P. McFadden, Paul Lincoln, W. Cameron and L. H. Biggar, while J. J. Warren, S. G. Blaycock and T. D. Bingay represented the Consolidated.

A tentative proposition on the part of the company was to pay 95 per cent. of the silver and 90 per cent. of the lead contents, irrespective of the zinc content of the ore. The old schedule inflicted heavy penalties for more than 10 per cent. of zinc. The treatment charges for zinc ores to be reduced from 60 to 50 cents per unit. Payment to be made in 90 days from either day of receipt or day of sampling, and prices to be regulated by London quotations, instead of New York quotations. The company, however, will be prepared to give notes at 90 days on day of sampling, and these, of course, will be discounted at the local banks. The company proposes to lower its deduction for exchange from five to three per cent.

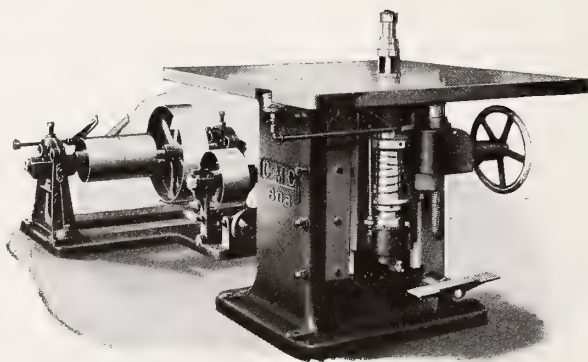
Individual owners seemed to be satisfied with the proposals, and they will form the basis of the new schedule. The removal of the impasse that has existed for nine months will give a distinct fill-up to mining in the Kootenay district.

New Source of Tannin

British Columbia Chemists Experimenting with Bark of Western Hemlock Trees

The suggestion that tannin, a material extensively used for the tanning of hides, can be made from the bark of trees used in the pulp and paper industries of British Columbia, is now being made by chemists.

Details of how this can be done are set forth in an article by Drs. R. H. Clark and H. I. Andrews, of the Department of Chemistry, University of British Columbia, Vancouver, in the current number of the *Journal of Industrial and Engineering Chemistry*. They believe that this extraction can be profitably conducted, and submit analysis made of freshly cut Western hemlock for various months in the year.



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OFFICE AND FINANCE

Basing Compensation Upon Individual Worth

By MERRILL R. LOTT

Personnel Superintendent, Sperry Gyroscope Co.

Reprinted from Industrial Management

IS IT possible to adjust the pay of an individual day worker upon his value to the company served and make distinction between the degree of skill, production and general merits of different employees following a given occupation? The following description gives a plan which has been in successful operation for several years. The idea is not a new one, for in nearly all plants where day work has been followed there has been some sort of flexibility in the application of rates of pay in which the highest skilled employee may expect to be paid more than a mediocre one for the services rendered. Usually, however, rates are awarded with no tangible standards to work from, with the result that there is no really equitable relation existing between individuals, nor any definite wage incentive available to stimulate the desire for self advancement among the less skilled workers.

When the piece rates, premium rates or task and bonus systems are applicable, the problem is met in a more or less satisfactory manner, but when the nature of the industry is such that high quality of workmanship is required on small quantity and varied production, there has been difficulty in applying compensation based upon individual merit.

In the case of day workers, the executive responsible for wage adjustments frequently faces the question in its several phases.

a—Is it possible to place a person in a position that is best adapted to his abilities without a careful study of his qualifications?

b—Will an individual be able to produce more with less effort when he is placed on work for which he is best fitted?

c—Will a person find an incentive for self advancement when he knows how he matches up with the qualifications for a position he is supposed to fill?

d—Will a worker be able to use his efforts more intelligently in acquiring skill for higher positions when he knows the requirements for those positions?

e—Will it be easier for the company to provide advancement for an employee when that employee's qualifications have been fully analyzed?

f—Is it proper that the amount of financial reward correspond with the worth of an individual in a given occupation?

A survey of the situation leads to the conclusion that a worker's value in a given occupation is based upon four general considerations.

Education and Experience.
Knowledge of the work.
General Value to the Company.
Physical Characteristics.

Education and Experience

The education and the time element of the experience of an employee may be considered as indicating his "opportunity period"; that is, a person must have spent some time in preparation for the occupation which he may be following which serves as a background to guide him in the application of the knowledge he possesses. This "opportunity period" would include his education as applied to his work, apprenticeship, length of time served in the occupation or a preparatory occupation; with other companies as well as with the present one. In this connection, service with a company having a high standard of workmanship would indicate a better training than service with one that may have an indifferent standard in such matters.

From the standpoint of education, it is not necessary that a person should know calculus in order that he serve as a tool maker—but it is right to expect that he would be familiar with common

arithmetic and know something about angles and their functions. In the length of service, it is reasonable to presume that a person would have had more opportunities to acquire the necessary knowledge if he has worked for some time in the particular line under consideration.

Knowledge of the Work

In a given occupation, a worker's value will depend upon his knowledge of the trade. In machine shop practice this would include his familiarity with the machine tools used, the various operations that may be performed with them, the materials handled and the method of arriving at a given result. Consideration would be given to a person's ability to plan and execute his work from blueprints or from verbal or written instructions.

As for hand tools and measuring devices, a machinist may be called upon to use steel rules, calipers, gauges, micrometers, hammers, center punches, scratchawls, dividers, screw-drivers, etc., and his possession of such tools would give an indication of his knowledge of the work.

In the handling of machine tools, a worker should possess a knowledge of the adjustments for different speeds and feeds, and in the handling of materials he should know some of their physical properties that he may select the proper cutting tools and cutting compounds as required.

General Value to the Company

The manner in which an employee applies his knowledge to the work which he may be called upon to do, is an extremely vital factor. He may possess all the knowledge of the trade but may fail to be a valuable employee through the lack of consistent application of that knowledge. One person may have less actual knowledge of the work than another but may use what he does possess in such a way that he makes a more valuable worker than the indifferent one. Thus, the quality and quantity of production consistent with the skill possessed should be taken into account, bearing in mind that the production secured may depend upon the aids given him in the way of tools and fixtures.

Regularity of attendance, disposition, conduct and dependability have an important bearing upon his value to the company irrespective of his ability to do the work.

Physical Characteristics

The physical conditions; age and sex of a worker have a direct bearing upon a person's value in a given occupation and consideration should be given to these items when determining his worth.

The main considerations listed above will apply irrespective of the trade or occupation which a worker may follow and values may be assigned in accordance with their relative importance. For example, an ideal worker in a given occupation would be scored as follows:

	Maximum Rating
Consideration.....	
Experience	15
Knowledge of Work	50
General Value to Co.	25
Physical Characteristics	10
Total	100

A person's actual *Knowledge of the Work* is considered the most important feature, for knowledge is the very foundation of his worth, *Experience* only measures his opportunity to acquire that knowledge. The item of *General Value to the Company* establishes his usefulness, and *Physical Characteristics* indicate his physical fitness for the work.

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The question arises—how may this score be applied? The rating plan followed by the Army may be used to advantage where there are a number of persons following a given occupation; this plan is based upon comparing one person with another and may be applied as follows:

In a group of tool makers, consider the individual workers from the standpoint of the groupings listed, taking each group separately and applying it to the various workers. The tool maker having highest qualifications from the standpoint of experience may be rated A, the one with the poorest qualifications is rated D, and the others are rated A, B, C or D depending upon that worth relative to the two men chosen as standards. The same procedure is followed for these men for the other items: Knowledge of Work, General Value to the Company and Physical Characteristics, taking each item separately.

Where there may be only a few workers subject to comparison, it may be necessary for the executive making the rating to draw upon his acquaintance with the other men in the occupation being considered, that he may have known elsewhere. This makes provision for recognition of the highly skilled men that may join the organization at a later date.

The tabulated result of such a classification may take the following appearance.

Name.	Occupation	Education and Experience	Knowledge of Work	General Value to Company	Physical Characteristics
John Jones	Tool Maker	A	B	C	A
Tom Brown	Tool Maker	D	C	A	B
George Johnson	Tool Maker	B	A	B	C
Sam White	Tool Maker	C	D	D	D

The next step is to determine the score for each worker.

On the basis that a person should possess at least half of the qualifications of the ideal person in a given trade for the items of Experience and Knowledge of Work, but permitting the items of General Value to Company and Physical Characteristics to vary to the full extent, we derive the following table:

Rating	Education and Experience	Knowledge of Work	General Value to Company	Physical Characteristics
A	15.0	50.0	25.0	10.0
B	12.5	41.7	18.8	7.5
C	10.0	33.3	12.5	5.0
D	7.5	25.0	6.3	2.5

Then taking John Jones rating as listed we secure:

Education and Experience	A	15.0
Knowledge of Work	B	41.7
General Value to Company	C	12.5
Physical Characteristics	A	10.0

79.2

This score may be translated into rates of pay per hour by having established standard rates of pay for the occupation as follows:

Score	Tool Makers Rate per Hour
95-100	receive \$1.00
90-95	“ .97
85-90	“ .93
75-85	“ .90
65-75	“ .87
50-65	“ .83

John Jones having scored 79.2 is entitled to the rate set as per score 75-85 and thus would receive \$0.90 per hour.

Similarly—

Tom Brown	rating 73.3 would receive \$0.87
George Johnson	rating 86.3 would receive .93
Sam White	rating 43.8 would receive 0.83

In the case of Sam White, it is hardly probable that he would be retained as a tool maker, as his total score is less than 50. This is particularly true from the standpoint of his low rating in General Value to the Company as well as Physical Characteristics which would indicate that he was not adapted to the work.

Now, how does this work out with John Jones? When informed of his rating, he may claim, in view of his long experience, that he should receive the top rate. The matter would be talked over, point-

ing out that while he may have had the experience that should give him full knowledge of his trade, it is frequently necessary to demonstrate the best way of performing a given operation; while George Johnson, on the other hand, goes right ahead on his own initiative on the same job. Then too, John Jones has a bad record for attendance and lateness and it is frequently noticed that he washes up before quitting time and makes frequent errors in his work through negligence. These faults explain the C rating in General Value to the Company. He is then told that the opportunity is open for him to improve his rate through exercising a greater interest in heeding instructions once given and in acquiring a better knowledge of his trade as well as through improving his conduct. If John Jones is the proper type and the matter is taken up in the proper way, he will set out to earn the higher rate of pay. This should be made available to him as soon as he establishes a record for better value. Of course, he is reminded that the plan works both ways,—that if he depreciates in value the rate drops accordingly.

Plan Equitable to All

The question may arise as to the process for instaling such a rating plan so that it may work to the benefit of all in the most equitable manner.

In the first place, it is advisable to prepare a written description of the qualifications of an ideal worker in each occupation, and these should be made available to all executives responsible for rating and should be open to the employees for their inspection and information.

The men should be classified by the executive in immediate charge of their work. This is usually the foreman. The classification should then be reviewed by the next higher executive in conjunction with a third person. This procedure is essential in order to eliminate personal prejudices that might otherwise creep in. The foremen need only specify the classification, such as ABCA, leaving the score interpretation to some person in the Employment Office where complete records of the individual workers are maintained.

Workers should be rated at regular periods, perhaps every three months, but if an individual improves or makes a distinct change in his classification during the interval, he is eligible to receive the corresponding rate of pay without waiting the regular period.

The plan should be thoroughly explained to all workers through the Company's book of rules, plant publication, and by the executives in close contact with the employees. Each person should know his own rating, but the matter should be treated as confidential on the part of the executive, the executive taking the opportunity to exercise his leadership by pointing out the weaknesses in a friendly way and giving encouragement in overcoming them.

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Issue of \$2,000,000 Preferred Stock of English Electric Co., of Canada

An issue of \$2,000,000 of 8% cumulative preferred shares of the recently incorporated English Electric Company of Canada, Limited, is being offered for sale by the Canadian Debentures Corporation, Limited, of Toronto. An issue of 30,000 shares of common stock (no par value) is also to be distributed as a bonus on a basis of 4 shares of common stock with each 10 shares of preferred.

The Canadian company is associated with and holds in perpetuity the exclusive manufacturing rights for Canada of the English Electric Company, Limited, of Great Britain. Through a purchase of capital stock they have also acquired control of the Canadian Crocker-Wheeler Company, Limited, thus possessing at the outset a plant and an established sales connection. They also hold the right to export to the United States and Newfoundland.

The preferred shares are preferred as to assets and dividends, and are entitled to a fixed cumulative dividend at the rate of 8% per annum from the date of issue, payable quarterly on the last days of March, June, September and December. The first dividend will be paid not later than March 31st, 1922. Provision is made for the redemption in whole or in part at 110 and accrued dividends on any dividend date after 60 days' notice.



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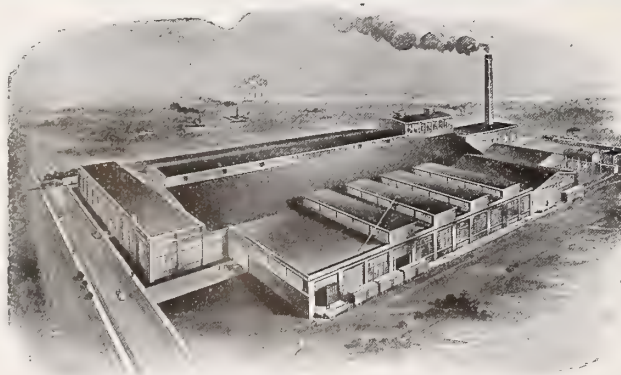
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Carriage Factories, Limited**Loss Shown in Annual Statement for Year Ended July 31st last.**

Carriage Factories, Limited, for the year ending July 31st last, shows a further loss, largely accounted for by the reduction in the value of inventory. The loss for the year, after providing for depreciation and bond interest, amounted to \$92,952.72, to which must be added the loss of \$64,132.37, making a total deficit at the end of the past fiscal year of \$157,085.00.

The inventories at the end of the year, less a reserve of \$88,189.79, totalled \$543,854.30, comparing with a similar amount in the previous report of \$904,969.28. The auditors employed by the management state that they tested the inventories as to their mathematical accuracy and that they secured a certificate from the officials of the company to the effect that the reserve of \$88,181.79 was sufficient to reduce the prices to cost.

Mr. James B. Tudhope, the president of the company, reports that the business for the year was largely one of liquidation, the desire being to lessen the large inventory and reduce liabilities, in which the management must be held to have been fairly successful.

The company's land, buildings, machinery and equipment, less reserve for depreciation, are set forth at a value of \$928,588.60, which compares with a similar item a year ago of \$971,318.06. The vestments have been marked down from \$225,790.96 to \$215,750.00. Accounts and notes receivable, less a reserve of \$26,244.07, amounted to \$352,813.74; the similar amount a year ago, less a reserve of \$34,279.03, stood at \$406,028.59. Cash on hand amounted to \$3,672.87, as against \$645.46 a year ago.

Current liabilities totalled \$404,860.28, including \$375,831.52 to bankers on loans and overdrafts, \$9,989.21 to trade creditors and \$19,039.55 in wages, bond interest, etc. The current liabilities a year ago totalled \$735,105.62.

The company's assets are given at \$3,453,245.02 over against \$3,898,364.27 in the previous year.

Ogilvie Profits Reduced**Milling Company Earn Less But Have Improved Their Working Capital**

A decrease of over \$300,000 is shown in the profits of the Ogilvie Flour Mills Company, which stand at \$636,303 as against \$959,665 a year ago. After providing for the payment of the regular 7 per cent. on the preferred there remained a balance of \$496,303 available for distribution among the holders of the common stock. This result is equivalent to 19.85 per cent. on the common stock, as compared with 32.36 per cent. last year and 59.7 per cent. for 1919.

After all deductions, including those for dividends on common and preferred stock, the company carried over for the year the sum of \$196,303 to the profit and loss account, which compares with \$269,065 for the previous year. The amount at credit of profit and loss is thus brought to a total of \$1,709,886, as against \$1,513,582 a year ago. The rest account continues unchanged at \$2,500,000 and the contingent account is also unchanged at the same figure. The dividend disbursements of 7 per cent. on the preferred and 12 per cent. on the common, called for a total of \$440,000. Last year's dividend disbursements amounted to \$269,065.

The balance sheet shows the company has materially improved its position as to working capital during the year. Total current assets have increased by \$367,934 to \$10,209,787, while the increase in current liabilities is only \$58,663, the total being \$2,331,903. The company's working capital is thus increased during the year under review by \$309,271.

The balance sheet statement shows that the increase in current assets noted above is due to an increase of \$1,005,701 in accounts receivable, which are set at \$2,350,969, and an increase of \$178,995 in inventories shown as \$614,095. As against this the statement shows a decrease in cash on hand of \$453,305, which is thus brought down to \$1,055,200, and a decrease of \$363,457 in investments, which now stand at \$6,189,521.

Changes in current liabilities are an increase of \$303,663 to \$2,186,653 in accounts payable, including provision for taxes to date and a decrease of \$250,000 in the provision for bond interest and dividends to date.

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Chemical Products, Limited

Assets of Over Three and a Half Millions Shown on Balance Sheet of June 30th.

A statement of the financial position of Chemical Products, Limited, prepared for submission to the shareholders at the annual meeting at Trenton, Ontario, October 6th, shows the possession of large plant and equipment which the company expect to put into profitable operation when business conditions have mended. There is no statement of profit and loss, but the balance sheet as of June 30 last shows total assets of \$3,630,592, of which capital assets comprise \$3,031,197, mostly made up of buildings, plant and equipment, entered at \$2,578,653. There are inventories of \$173,459; mortgage and capital stock subscription, due from Ontario and Quebec Finance Corporation (from which the property was purchased), amounting to \$393,897; and with cash and accounts receivable making total current assets of \$599,395, against current liabilities of \$308,723. Sales made between date of purchase and June 30 last amounted to \$45,572.

Included in the statement of assets are three plants which the company does not intend to operate at the present time, and entered at the following values: Smokeless powder plant, \$318,162; nitric acid plant, \$341,911; pyro cotton plant, \$67,147. It is stated that the smokeless powder plant is practically fully equipped, but that the nitric acid and pyro cotton plants are only in a partly finished condition.

Profits Materially Reduced

Russell Motor Car Company, Limited, Issue Their Annual Statement

For the year ended July 31st last the profits of the Russell Moto Car Company, Limited, were materially reduced, standing at \$158,124 as compared with \$339,453 for the previous year. This is equal to earnings of 9.2 per cent. on common stock as compared with 38.8 per cent. a year ago. Business was uneven among the subsidizing companies. Canada Cycle & Motor Company, Limited, declared a dividend of 7 per cent. for the year ended December 31st, but the bicycle business has shrunk in volume during 1921.

Willys-Overland, Limited, have an improved outlook after coming through a troublesome period.

The Russell Gear & Machine Company, who make motor car parts, bicycle chains, spark plugs and gramophone motors report that they have considerable machine equipment in excess of requirements and it will be their policy either to dispose of it when business shows signs of revival or to take on additional lines of manufacture.

The balance sheet shows a reduction in bankers' advances from \$500,000 to \$120,000. Accounts and bills payable have also been reduced greatly, standing now at \$79,947, against \$416,025 a year ago. Accounts and bills receivable amount to \$487,872, against \$47,691 last year, so that the liquid position of the company has materially improved.

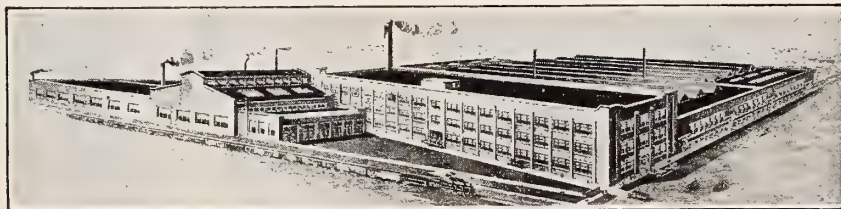
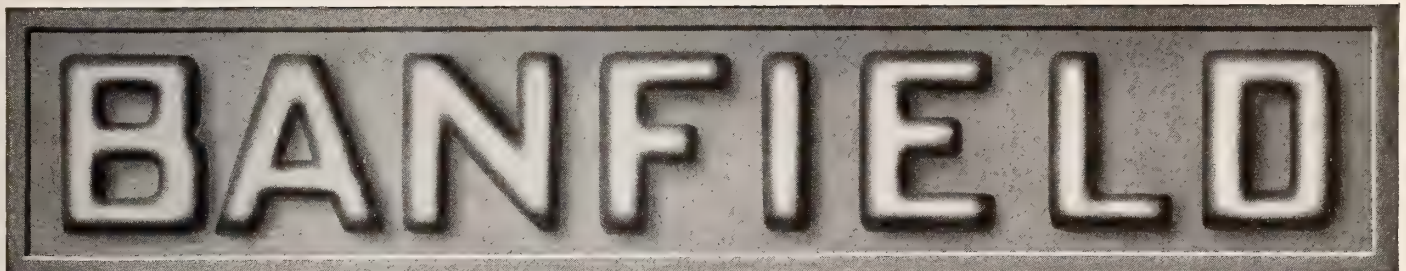
Leading items in the report are as follows, with comparisons:—

	1921	1920
Profits.....	\$ 158,124	\$ 339,453
Dividend on preferred.....	84,000	84,000
Dividend on common.....	56,000	56,000
Balance forward.....	1,071,618	1,053,494
Current assets.....	541,513	51,067
Current liabilities.....	434,947	951,025
Investments in other companies.....	3,464,793	5,113,993
Total assets.....	4,058,954	5,239,409

Issue Interim Report

Position of Canadian Connecticut Cotton Mills Company, Limited, as at June 11th

An interim report issued by the Canadian Connecticut Cotton Mills Company, showing the position of the company as at June 11, together with the company's subsidiary, the Sherbrooke Co., Ltd., shows current assets of \$2,693,777, and current liabilities of \$2,081,687, or an excess of current assets of \$610,090. Of the current assets, \$506,002 is in cash and a large part of the balance in inventory. After being closed from December 11 to March 12, the company is operating at 60 per cent. of day and night capacity of the old mill, and, although operations for the fiscal year ending September 10 will show a loss, there are large orders on hand, and the tire industry to which the manufactured products of the company cater, is improving.



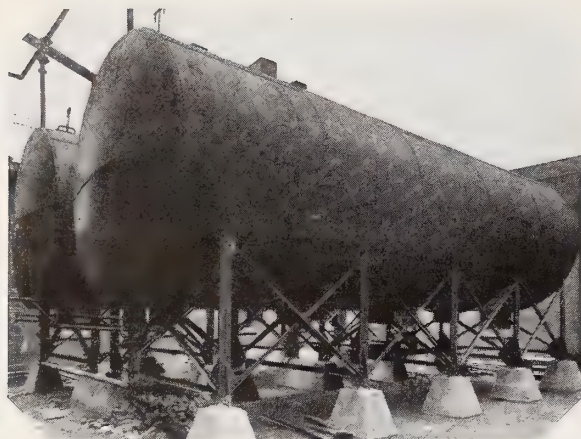
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The Pulse of Business in Canada

Trade Returns

Further Decline in Imports and Exports is Shown in September

September trade returns issued by the Department of Customs show a further decline in which both imports and exports are affected. The exports of foodstuffs were practically the same as last year while imports of the same have decreased considerably. Following are the figures:

IMPORTS ENTERED FOR HOME CONSUMPTION

	Month of September 1920		1921	
	Free	Dutiable	Free	Dutiable
Agricultural and vegetable products, mainly foods....	\$ 3,268,819	\$10,059,877	\$ 1,775,600	\$ 6,959,823
Agricultural and vegetable products, other than foods.....	4,009,546	2,723,442	2,444,046	1,672,454
Animals and animal products.....	2,160,950	2,798,711	1,367,949	2,087,870
Fibres, textiles and textile products.....	5,652,684	6,352,961	2,298,434	7,893,884
Chemicals and chemical products.....	1,961,889	1,983,871	662,797	1,245,965
Iron and steel and manufactures thereof.....	4,821,422	19,966,251	1,026,126	7,099,765
Ores, metals and metal manufactures, other than iron and steel.....	1,748,847	3,632,325	414,653	2,016,499
Non-metallic minerals, and products.....	7,486,090	13,629,063	5,734,720	6,084,800
Wood, wood products, paper and manufactures	2,517,731	3,203,631	1,181,019	1,944,250
Miscellaneous.....	3,609,955	3,533,523	3,747,213	2,063,735
Total.....	\$37,237,933	77,883,655	20,652,557	39,069,045
Duty collected.....		\$15,507,865		\$ 9,775,510

EXPORTS

	Month of September 1920		1921	
	Domestic	Foreign	Domestic	Foreign
Agricultural and vegetable products, mainly foods....	\$20,606,790	\$ 358,434	\$20,615,047	\$ 45,142
Agricultural and vegetable products, other than foods.....	2,248,537	31,458	960,536	75,991
Animals and animal products.....	20,387,261	189,781	13,326,832	262,369
Fibres, textiles and textile products.....	863,072	226,319	461,680	95,289
Chemicals and chemical products.....	1,958,473	224,304	484,180	123,556
Iron and steel and manufactures thereof.....	68,11,264	451,314	1,199,105	296,210
Ores, metals and metal manufactures, other than iron and steel.....	4,491,074	96,850	2,508,662	41,102
Non-metallic minerals and products.....	3,800,640	89,004	1,638,966	90,058
Wood, wood products, paper and manufactures	30,694,355	45,542	15,974,941	28,378
Miscellaneous.....	2,528,219	301,053	1,093,233	268,922
Total.....	\$94,389,685	2,014,059	58,263,182	1,327,017

Railway Earnings

Both C. P. R. and C. N. R. Have Satisfactory Earnings in September

Net earnings for the C. P. R. for September again show an increase over the same month last year and are also higher than in August, 1921. The gross earnings are slightly lower than in September, 1920. For the nine months ending with September net profits amounted to \$21,900,671, which is a gain of \$2,743,532 over the corresponding period of 1920. The C. N. R. lines also show satisfactory earnings for the month. Following are the figures:

CANADIAN PACIFIC RAILWAY

	September 1921	September 1920	Decrease
Gross earnings.....	\$19,474,761	\$20,009,287	\$514,526
Working expenses.....	15,174,711	16,100,631	925,920
Net earnings.....	4,320,050	3,908,856	X 411,394

CANADIAN NATIONAL RAILWAYS

	September, 1921	Net Earnings
Gross Earnings	\$11,500,126.24	
Working Expenses	\$10,995,951.37	\$504,174.87

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Wholesale Prices

Index Number Shows Decline for October of 45.8 per cent. From Peak Prices

The index number of wholesale prices in Canada, constructed by Prof. H. Mitchell, of McMaster University, Toronto, stood at 161.5 for the month of October, showing a decline of 1.7 per cent. from the previous figure of 164.4 for September, and a total decline of 45.8 per cent. from the peak of 298.3 reached in May, 1920. The present figure is 32.8 per cent. in advance of the figure of 121.6 for September, 1913.

Among the twenty foodstuffs listed, declines were registered in flour, beef, pork, bacon, lard, cheese and sugar, while fish, butter, eggs and tapioca advanced. Among the twenty manufacturers' goods included declines were registered in wool, cotton, bar iron galvanized sheets, silver and pine, while advances were registered in rubber, coal oil, oak and maple.

The continued weakness in all farm products, which extends to meats as well as grains, would seem to make it fairly certain that the decline in the general index for all products in Canada will continue for some time. This decline is not altogether unhealthy, since it is really now the process of adjustment of the various items to a general level.

It is to be noted that the fall in wholesale prices in the United States has been heavier than in Canada, and it is to be expected that for some time Canadian prices will continue to decline more rapidly than those in the United States until the level between the two is more even.

Bank Clearings

Edmonton is the Only City to Show an Increase Over October, 1920, Clearings

A decrease of \$393,320,469, or 20.5 per cent., is shown in the bank clearings reported by 24 Canadian cities for the month of October. Thirteen Eastern cities had a loss of \$243,834,480, or 18.8

per cent., while eleven Western cities were behind \$149,485,989, or 23.9 per cent., when compared with the same month last year.

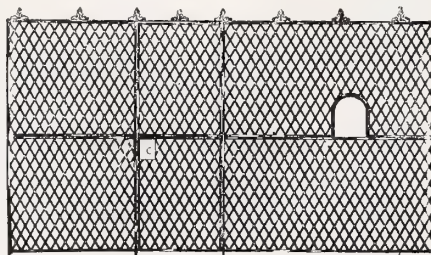
An increase of \$865,775, or 3.5 per cent., was shown by Edmonton, but it was the only city to show an improvement. Toronto's decrease was a small one, only amounting to 3.2 per cent., while, Montreal was behind to the extent of 28.7 per cent. A loss of 54.2 per cent., shown by New Westminster, was the heaviest in the list.

The following tables give the clearings for the month, with comparisons:

EASTERN BANK CLEARINGS			
	Month ended Oct. 31	Increase over '20	Inc. P.C.
Toronto.....	\$ 459,625,955	x\$ 15,290,480	3.2
Montreal.....	441,521,625	x177,177,888	28.7
Ottawa.....	30,185,024	x16,046,579	34.7
Hamilton.....	24,125,254	x10,115,757	29.5
Quebec.....	13,037,274	x6,314,082	20.8
Halifax.....	13,824,949	x5,983,891	30.2
St. John.....	11,630,479	x1,1890,375	13.9
London.....	13,415,730	x2,785,719	17.1
Windsor.....	13,076,482	x3,401,990	20.6
Brantford.....	5,347,329	x1,081,793	16.8
Kitchener.....	4,449,496	194,847	4.2
Sherbrooke.....	3,661,429	x1,815,089	33.1
Peterboro.....	3,394,803	x1,141,990	25.1
Total.....	\$1,048,295,828	x\$243,834,480	18.8
Moncton.....	4,605,088		

WESTERN BANK CLEARINGS			
	Month ended Oct. 31	Increase over 1920	Inc. P.C.
Winnipeg.....	\$ 309,092,170	x\$105,748,435	25.4
Vancouver.....	58,591,205	x13,972,299	19.2
Calgary.....	31,031,896	x16,422,718	34.6
Edmonton.....	24,923,581	865,775	3.5
Regina.....	20,173,021	x3,731,241	15.6
Saskatoon.....	10,288,039	x1,320,861	11.3
Moose Jaw.....	7,469,343	x2,959,172	28.3
Brandon.....	3,942,402	x283,285	6.7
Fort William.....	3,882,944	554x,599	12.5
Lethbridge.....	3,334,068	x2,076,550	38.3
New Westminster.....	2,766,621	x3,282,604	54.2
Total.....	\$ 475,495,290	x\$149,485,989	23.9
Total East.....	\$1,048,295,828	x\$243,834,480	18.8
Grand Total.....	\$1,523,791,118	x\$393,320,469	20.5
Victoria.....	10,604,143		
Medicine Hat.....	2,331,978		

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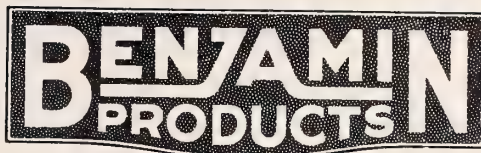
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Pig Iron and Ferro-alloys **Production during August Nearly 4,000 Tons Lower than during July**

The quantity of pig iron and ferro-alloys produced during the month of August was nearly 4,000 tons lower than that of the previous month. Pig iron made by the firms for their own use dropped about 10% or 5,828 tons below last month's figures. The output of basic iron was considerably higher, being 46,939 tons as compared with 40,720 tons in July. Foundry iron production decreased from 10,339 tons in July, to 1,882 tons in August. This decrease was entirely in that which was made for the use of the producing firms. Malleable iron also declined during this month, none of the firms reporting any of this product as being made for their own use, while 1,234 tons was made for sale. There was but a slight falling off in the output of electric iron castings; last month's total of 105 tons being lessened by 4 tons. Pig iron made for sale during August amounted to 3,207 tons, which was an increase of 1,898 tons over that of July.

The reports for this month show that there were 2,547 tons of spiegeleisen produced. There is included in this amount 94 tons, which was sold, this being the first sale of spiegeleisen reported since February. The several grades of ferro silicon totalled 967 tons for August as compared with 659 tons during the previous month, a gain of 308 tons.

The Algoma Steel Corporation reported only two blast furnaces in operation at the end of the month, one having been blown out during the period. This loss leaves a total of five furnaces operating and fifteen idle at the end of August. The blast furnaces active were as follows: two at Sault Ste. Marie, one at Hamilton, and two at Sydney.

Imperial Oil, Limited

Issue of 142,628 Shares of Unissued Stock is to be Made.

Announcement is made that the directors of Imperial Oil, Limited, have decided to issue 142,628 shares of the unissued stock of the company at the price of \$90 a share. The issue will be

made on the basis of one share of new stock for every ten shares of stock issued and outstanding on November 19th and each shareholder will be entitled to subscribe and pay for one new share in respect of each ten shares then held. Allotment of the shares will be made on or after December 10th. Fractional shares will not be allotted.

Hockey Sticks Burned

Fire Destroys Plant and Stock of E. B. Balyerds, Preston, Ontario.

The large plant of E. B. Balyerds, hockey stick manufacturer, Preston, Ontario, was destroyed by fire on October 13th. The walls are all that is left of the building.

The origin of the fire is unknown and the interior of the building was a mass of flames before the fire was discovered. The loss is estimated at from \$25,000 to \$35,000, partly covered by insurance. Five thousand dollars worth of hockey sticks, almost finished, were destroyed.

F. John Bell

Resigns as President and General Manager of the Canada Wire and Cable Company

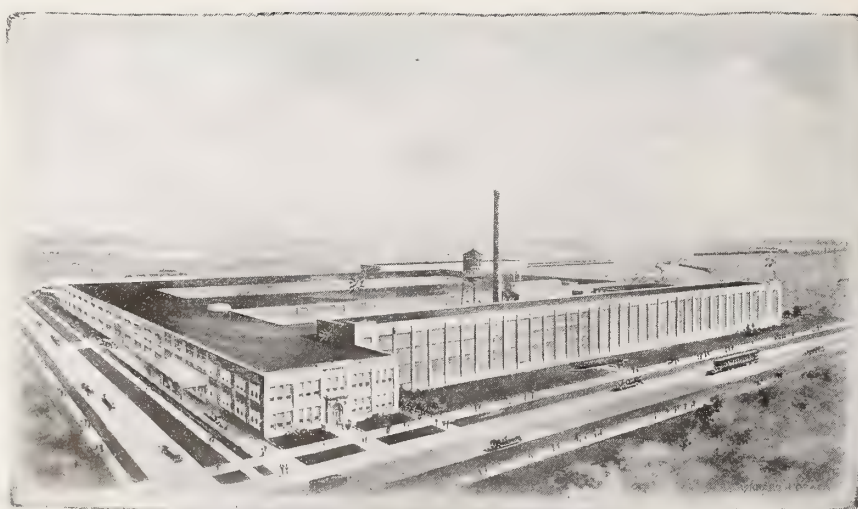
Announcement is made of the resignation of F. John Bell as President and General Manager of the Canada Wire & Cable Company, Toronto, manufacturers of electrical wires and cables, with factories at Leaside Ontario, and branch offices in different cities of the Dominion from Halifax to Vancouver.

Mr. Bell has also resigned as President and General Manager of the Leaside Engineering Co., which corporation control the Cable Company and other firms, including the Leaside Munitions Co., manufacturers of shells during the war for the British and United States Governments.

Prior to joining the Cable Company in 1913 Mr. Bell was General Manager and Secretary of the British Canadian Power Co., which supplies electric power and compressed air to the silver mines of Cobalt and South Lorain in the Northern Ontario Mining District.

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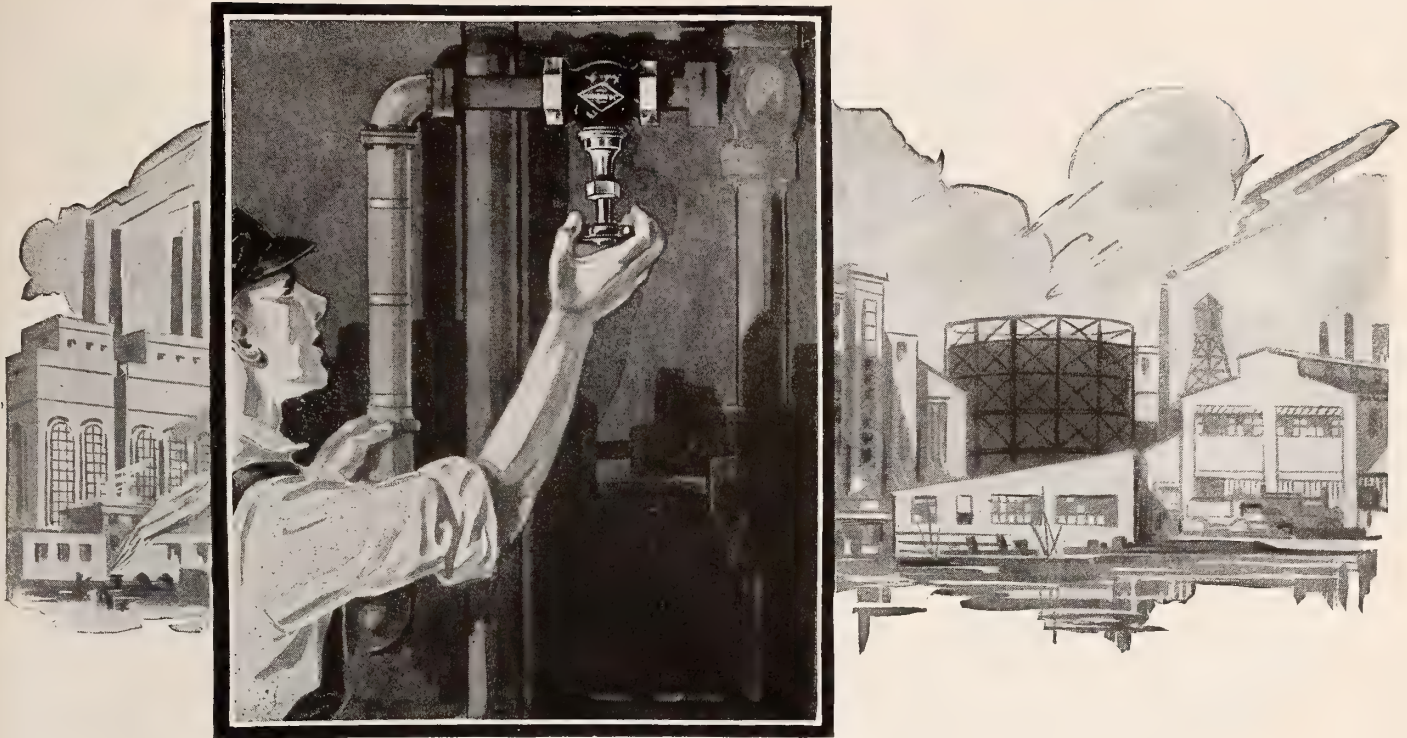


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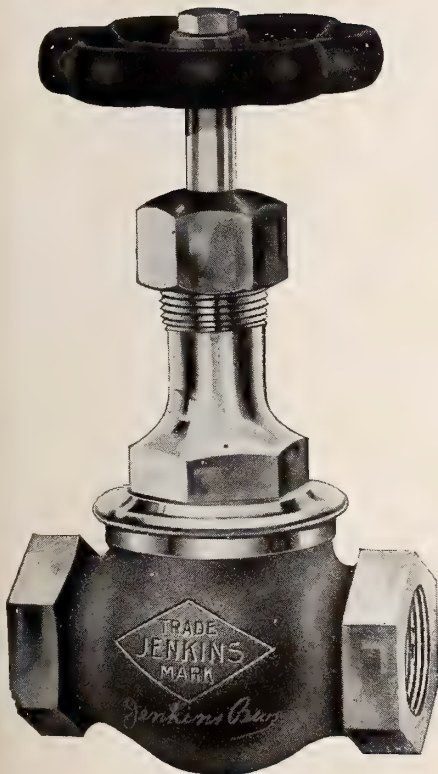


Fig. 106

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SUCH MEN HAVE FAITH in the road they will find tomorrow, so they fearlessly give orders for repairs, replacements, additions, and still more boldly for entirely new undertakings today in order to be ready for the onward march that lies before them tomorrow.

THIS IS NO OPTIMISTIC GUESS at what MAY be, for DES MOINES engineers are today erecting new buildings or additions; there are orders on hand and under way for tanks of all types; for all sorts of steel work and steel plate work to meet the requirements of tomorrow's industrial and engineering enterprises.

A CORPS OF ENGINEERS IS MAINTAINED and no obligation will be incurred by requesting information, or by personal conference relating to your projects for TODAY and TOMORROW. Write to us about your requirements.

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Book Reviews

Bryce on Canada

CANADA, An Actual Democracy. By the Right Honourable Viscount Bryce. Toronto:—The MacMillan Company of Canada, Limited.

This little book (55pp) is reprinted from the larger work by Lord Bryce, "Modern Democracies," and it would seem that its wide circulation in Canada is of prime importance. The book should be of particular interest to Canadians as it is written from the viewpoint of an impartial observer and also one who has been for many years a keen student of Canadian affairs. Moreover, it is distinctly up-to-date, questions such as Canada's recognition in the Peace Treaty, the Farmers' Movement, the Winnipeg Strike and Prohibition receiving consideration.

Contrasting conditions in Canada with those of other countries, Lord Bryce notes the absence of two factors powerful in the great countries of Western Europe, and equally so in the United States:—"There are not so many great capitalists or incorporated companies taking a hand in politics for their own interests, neither has the element of working men congregated in large centres of industry, and organized in labour unions, found leaders of conspicuous scapacity, nor acquired a voting power which, whether by strikes or votes, can tell upon the action of governments. On the other hand, one feature which is conspicuous by its absence in Great Britain, the United States and New Zealand is in Canada of first importance: the influence of Race and Religion."

Lord Bryce believes "that in every Canadian Cabinet there are two or three men equal to the average of a cabinet in London or Washington, although the range is naturally smaller in a smaller population, and in the incorporation of a ministry regard must be had not only to talent but to the necessity of representing different parts of a vast area." "The methods followed in legislation," he says, "have generally been similar to those of the British Parliament, and here as there speaking has become plain and business-like with little rhetoric."

Further, the writer points out two features which have not been sufficiently developed in our political life: a wide vision and clear insight in consideration of issues of policy; and a body of trained opinion. "In Canada the large and permanent issues have been few, and in their absence the smaller but nearer issues by which votes are captured have occupied the field. In every country a game played over material interests between ministers, constituencies and their representatives, railway companies and private speculators is not only demoralizing to all concerned but interferes with the consideration of great issues of policy, on the wise handling of which a nation's welfare depends. Fiscal questions, labour questions, the assumption by the State of such branches of industry as railroads or mines—questions like these need wide vision and clear insight. These qualities have been wanting and the people have begun to perceive the want. In the older countries of Europe, there is a body of trained opinion capable of criticising and more or less controlling the action of governments. In Canada that opinion has not been strong enough or concentrated enough to keep legislators and administrators up to the mark in efficiency or a sense of public duty."

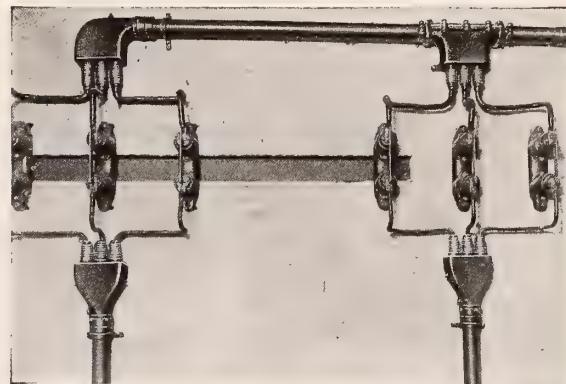
Among other questions dealt with we might cite: action of public opinion in Canada and the United States, party organizations, merits and defects of our government, present problems and external relations. This book is undoubtedly the best modern review of Canadian politics.

T. M. K.

The Pulp and Paper Industry

Lockwood's Directory of the Paper, Stationery and Allied Trades. 47th Edition, 1922, New York: Lockwood Trade Journal Company, Inc., \$7.00.

This old-established annual directory of the paper trade has, in its 1922 edition, surpassed all previous issues and now extends to upward of 950 pages. The additions and changes in the new edi-



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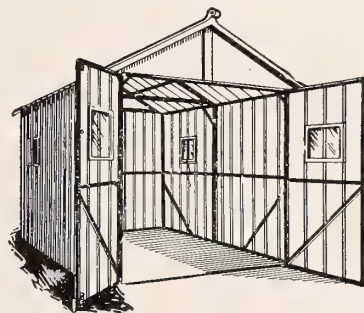
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tion are more numerous than in any previous edition, owing to the number of new and important mills that have been listed for the first time, to the change made in the classes of paper produced by the various mills and to extensive additions to other departments. The publishers state that they have given through revision to all their lists and that the book is quite up-to-date.

The directory is international in scope, giving equal attention to the industry in Canada as to the industry in the United States. The information is not combined but is given separately, thus making reference easy. Thus, there is supplied a list with full particulars of pulp and paper mills in Canada, classified lists of pulp mill and paper mill products, lists of paper merchants and stationers and much other detailed information of a useful character. It is scarcely necessary to say that the volume is invaluable to all business houses having dealings with the pulp-paper and allied trades and the new edition, by reason of the many changes that have occurred, should supersede the older editions as soon as possible.

Development of Brazil

The Agricultural and Economic Development of Brazil. Rome, 1921, Printing Office of the International Institute of Agriculture.

This booklet, which is reprinted from the *International Review of Agricultural Economics*, gives in concise form a survey of the principal agricultural and industrial activities of Brazil. The war, which prevented Brazilians from obtaining supplies of many manufactured articles which they had been in the habit of importing from Europe or North America, caused a remarkable industrial development. In 1914 there were in Brazil 13,342 factories; in 1916 the number had risen to 26,493. The textile industries, handling cotton, wool and jute, are the most important.

The booklet deals also with the foreign trade and the banking system of Brazil. In the latter section are given lists and statistics of the banks operating in Rio de Janeiro and the States of Sao Paulo, Rio Grande do Sul and Minas Geraes.

History of a Great Bank

History of the Canadian Bank of Commerce, Vol. I. Victor Ross, Oxford University Press. \$10.00.

It is not often that one is so agreeably surprised on reading a heavy tome with a heavy title as becomes one's good fortune in the perusal of Vol. I of the *History of the Canadian Bank of Commerce*. This history is replete with the relation of vivid incidents, humorous situations, descriptions of widely varying economic conditions tied together by frequent reference to Canadian historical events with which the banking personnel from Halifax to Vancouver were closely identified, or which were of great moment to the success or otherwise of the operations of provincial or district banks ultimately forming part of the Canadian Bank of Commerce system.

History, as viewed by most unacademic persons like ourselves, is or has been made by educationists a dry and dusty weariness to the flesh and spirit. To anyone having this view of History, the present volume is misnamed. The relation marches jauntily across the page. The characters enter and exit as in a play. Yet, when a section is completed, unconsciously one has absorbed a real history of one of the early banking institutions and has a clear view of the banking and mercantile conditions in various parts of British North America from 1820 up to Confederation and later.

There is a curious contrast between this book and most volumes dealing with statistics or economics. For instance, if one reads in a blue book that the Maritime Provinces export \$4,000,000 of dried codfish in a year, it is simply a statement of a bald fact with little imaginative stimulation. But when one reads in this History that it was the sale of dried codfish to the West Indies and Southern Europe that provided Nova Scotia with almost its sole metallic currency to form the basis of credit for all its activities, a new light is thrown on the dry elements of commerce and export. Not a little interest is added by the fact that the coins used were chiefly Spanish doubloons, pieces of eight and pistareens! There is high talk of the building of fleet sailing ships, war, the

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When you figure the price of a gallon of paint there are certain fixed costs that must be reckoned with before you can arrive at a true figure:

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Low price generally means low quality. The immediate saving effected when you buy paint on the basis of low price is invariably wiped out in a short time. Frequent repainting with additional outlay for material and labor—lack of service and protection—run up the maintenance bill to unwarranted figures.

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The price of Degraco Paints has been reduced in proportion with production costs. You pay only the manufacturer's low margin of profit when you buy Degraco Paints.

Degraco Paints are made in all colors for all purposes:

Superior Graphite Paint for the protection of structural steel and metal.

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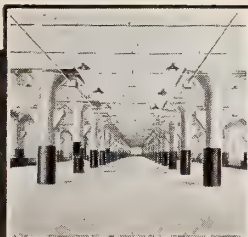
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financing of cargoes from China, bank robberies, blockade running and privateering. Shades of Robert Louis Stevenson!! What is the need of fiction when reality yields so much romance.

British Columbia at a later period than that dealt with in the Maritimes reveals similar features of humor, romance and business enterprise. The high cost of living in early mining days is vividly portrayed in the story of the minister with an enormous appetite, who, when he continued to patronize a \$2.50 table d'hôte restaurant, had his price raised to \$5.00, and was later requested to transfer his patronage elsewhere! The Bank of British Columbia, later amalgamated with the Canadian Bank of Commerce, had its head office in London, England. Mail communication was of necessity intermittent, infrequent and casual. British warships carried the bul- lion to London and occasionally mail. All sorts of queer banking practices of the minor sort and inattention to Head Office instructions resulted from this indirect and infrequent control. Similarly it was difficult to get the approval of Head Office for major operations or new proposals. Ultimately, however, the bank extended its scope to San Francisco and the border States. These conditions coupled with the precarious nature of inland transportation and the romance of mining operations in a wild country made for exciting times and a variety of experience in a banker's life not now his normal course, and the accounts by men who were active participants lose nothing in the telling.

Equal in interest and vitality are the stories of the Merchants' Bank of Prince Edward Island, the Gore Bank of Hamilton and Western Ontario, and the Eastern Townships Bank with its strength in Quebec and valuable connections in Western Canada. Each relates a story of severe struggles, conducted usually by groups of men faithfully standing by one another in times of stress and lending great services to the stability of the business and finance of their districts by their exemplary integrity and the gradual development and application of sound banking principles, based on the trying experiences through which each of them in turn passed. Such names as William Lyon Mackenzie, Sir Alen MacNab, Sir Louis Davies and others less well known, but none the less in-

teresting, are welded closely into the story, giving it the vividness and life and making it human and real.

The ample discussion devoted to the early history of small banks in their simple form, and the much less complicated form of inter-change of business, bring out very clearly the relationship of export trade to the commercial success of a district or country, the best methods to adopt during a period of deflation and the necessity for close and intimate contact of manufacturers, shippers and other business men with the directing influences of the banking system, which, after all, is the servant of commerce and not its master.

Perhaps the most striking thing in the book from the modern point of view is the close attention paid to and the value placed on the Trade with the British West Indies by the Halifax Banking Company. Unquestionably, the interest of the actual bank directors in this trade and their sympathy and friendly relations with the business men of the Islands has had more to do with the retention and increase of this trade from Canada than any other factor.

It is a curious commentary on the gradual movement of the headquarters of banking institutions from the Atlantic seaboard to Montreal and Toronto for financial reasons, that some of the larger institutions are only now in comparison to their size taking the same interest and responsibility in export trade as was assumed about a hundred years ago by smaller institutions.

There is sufficient vital information in the volume to warrant a Canadian Edison trying his hand at a full new set of questions as a test for a well informed man.

The interest in this volume is made more complete and enhanced by the sidelights thrown by attractive and frequent illustrations and appendices dealing with subsidiary questions merely touched on in the narrative. It is a story of vital pioneering struggle lit by humor and courage. There is nothing pedagogical in its treatment, yet sound practical lessons of great value to any business man can be obtained from a careful reading of this very fine study of early Canadian banking. May we soon have more!

A. MARSHALL.



A Fire Pail That Is Always New

THE Eddy Fire Pail never grows old. Ten years from the day you install it it will be just as new and as good as when it left the Eddy dealer's store.

Because the Eddy Fire Pail is made of Indurated Fibreware and made all in one piece, without hoop, seam or joint. Its surface is granite hard and is both odor and acid proof.

Ask your hardware dealer to show you the Eddy Fire Pail. Note how light it is—how strong—and note particularly the rounded bottom which assures it being always in its rack or on its hook when needed.

The E. B. Eddy Co., Limited
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G. & McC. Co. SECTIONAL WATER TUBE BOILERS

ARE TO BE FOUND IN CANADA'S LEADING POWER PLANTS

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The Boiler Room of the Saskatchewan Provincial Parliament Buildings at Regina, equipped with Four G. & McC. Double Drum Sectional Water Tube Boilers.

If you want increased steaming capacity and more rapid circulation install G. & McC. Boilers.
Ask for Catalogues, Prices, Etc.

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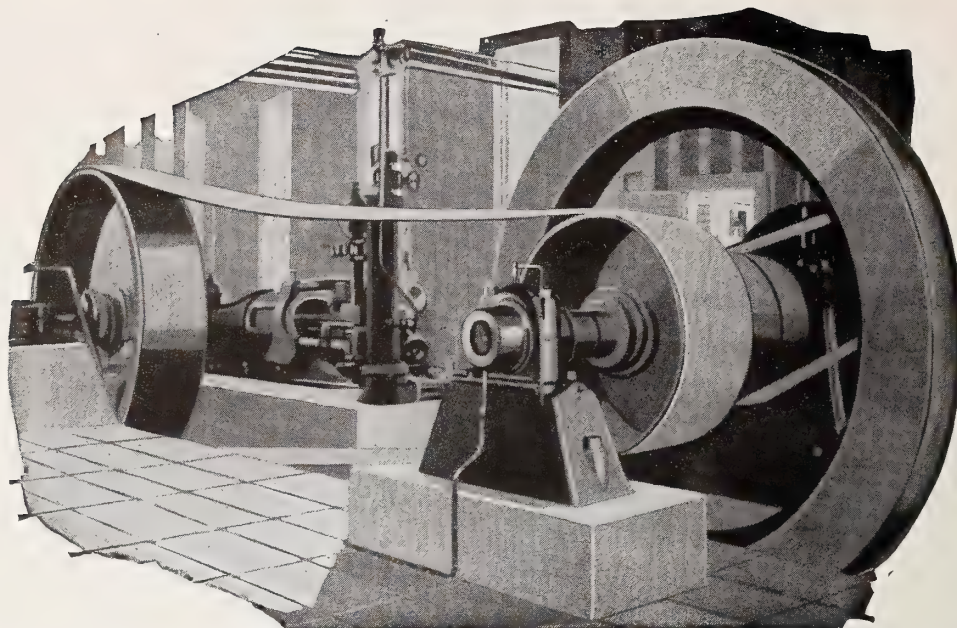
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Freedom from costly repairs and wasteful power leakage—due to inefficient transmission—is the result of the right belt in the right place. This is why Dominion Friction Surface Belting is in such wide use in industrial plants throughout the Dominion.

Without any obligation to you, our nearest service branch will gladly send an experienced belting man to help solve your transmission problems.

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Transmission: "Dominion," "Keewatin," "Para."
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Air: "Kushion Kover," "4810 Airtite," "Star."
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Sheet: "Join-Tite," "Star," "Importers."
Rod: "Cabestos," "Valve-Bestos," "Canadian."
Valves: "Montreal," "Commercial," "Canadian."

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Canada's Industrial Expansion

A RECORD OF PROGRESS

Have New Premises

Wiggins Systems, Limited, Winnipeg, Take Floor in Coca Cola Building

Wiggins Systems, Limited, Winnipeg, have taken over one floor of the Coca Cola Building there, where they will employ from 50 to 100 people continually in the production of direct by mail advertising literature. Eighteen multigraph units are used in the production of multigraph letters and there are typewriters, folders, sealing and stamping machines in proportion.

The company have been developing the automobile list section of their mailing list division this year, and have secured accurate facts about automobile registrations in the four Western provinces. The lists are compiled either numerically by license numbers or alphabetically according to post offices.

Large Contract Placed

Dominion Engineering Works Making Hydraulic Machinery For Montreal Waterworks

A contract for important additions to the pumping and distributing system of the Montreal Waterworks Department has been placed with the Dominion Engineering Works, Limited, Montreal, who specialize in the manufacture of hydraulic machinery of large capacity. The material ordered consists of three thirty million gallon, motor driven centrifugal pumps which will operate against a head of approximately 250 feet; six 42 inch suction gate valves and twelve 36 inch Johnson hydraulic valves, combined stop and check pattern.

The company have lately taken up the manufacture of large gate valves, their equipment enabling them to handle work of this kind from medium to largest sizes. At the present time they are building a Johnson hydraulic valve, 20 feet in diameter which is intended for installation at Shawinigan Falls under a head of 140 feet. This is the largest valve of this type yet undertaken anywhere.

Have Tripled Capacity

Canadian Roofing Manufacturing Company Prepare For Business Revival

New equipment installed during 1921 at the plant of the Canadian Roofing Manufacturing Company, Limited, Windsor, Ontario, will triple its capacity. The entire installation will be ready to operate by the beginning of the new year.

Commenting on this information, C. S. Jackson, general manager, writes: "We are mentioning this to prove to you that we are not afraid of Canada and its future, but will be ready for the big business which we know is coming. If our equipment is to remain idle for a period we are quite willing to carry the burden in view of what we know is coming."

A new product produced by the added equipment is the tapered asphalt shingle, which, the makers state, bids fair to be one of the greatest developments in the roofing industry.

Winnett and Wellinger

Sporting Goods Firm Enlarging Their Factory and Sales Facilities

Winnett & Wellinger, Limited, Toronto, makers of sporting goods have been experiencing a satisfactory rush of business and owing to rapid growth of their baseball and athletic goods department and the increasing volume of business in fancy leather goods they have found it necessary to enlarge both their factory and sales facilities.

In this connection F. W. Dunn has joined the firm and will direct the sales. Mr. Dunn has had several years experience with the Canada Cycle and Motor Company where he was assistant

sales manager, foreign manager and recently manager of production and purchasing.

Winnett & Wellinger report that orders for athletic goods for the coming season show a very considerable increase over last year's and they expect 1922 to be the biggest of their eighteen years in business. At the present time they are exceptionally busy on Christmas goods and are working with a full staff.

New Silk Industry

Guaranty Dyeing and Finishing Company, Limited, Located at St. Catharines

A commodious plant with up-to-date equipment, situated on the old Welland Canal at St. Catharines, Ontario, is the home of a newly-formed industry, the Guaranty Dyeing and Finishing Company, Limited. They intend to carry on the dyeing and finishing of natural and artificial silks.

The service rendered by the company will be useful to buyers of imported silks who will be able to purchase them in the greige and have them dyed and finished in accordance with the current fashions of Canada.

experience in the selling and manufacture of silks. He founded the

The company is headed by Ben S. Griffin who has had a wide silk glove manufacturing industry at St. Catharines some years ago. Frank W. Kruger is chemist and general superintendent of the plant and W. Gordon McChie is secretary-treasurer.

New Factory Planned

Increasing Business Causes Move for Wm. Shannon Company, Limited

A rapid increase in business has caused the Wm. Shannon Company, Limited, Toronto, to become too crowded and they have prepared plans for a new factory which they expect to occupy next May. The building, which will cost about \$75,000, will contain approximately 22,000 square feet of floor space, and provision is made for an additional 15,000 square feet when required. The company will continue their manufacture of cords, tassels and fringes for dress and drapery trimmings and laced cords for fancy work and lithographers' work in the new plant.

Have Rearranged Bakery

J. J. Scriven & Sons, Halifax, Install New Mechanical Equipment

J. J. Scriven & Sons, bakers, of Halifax, have completely rearranged their bakery during the past year and have installed two Petersen ovens with a complete outfit of Fletcher machinery. This includes an overhead travelling proof box, divider handing up machine, mixer, sieve, moulder and sack cleaner. In the opinion of the firm, they now have a plant equal to any in Canada. They are also making a new loaf called "Top Notch" and are finding a steady increase in sales.

Colonial Hide Company

Installing a Wool Pullery in Connection With Their Business at Windsor, Nova Scotia

The Colonial Hide Company, a subsidiary of the Colonial Fertilizer Company, Windsor, Nova Scotia, are installing a wool pullery in connection with their general business of dealers in hides, calfskins, sheep pelts, wool fur, etc.

This will be a complete plant for pulling sheep pelts, scouring and grading wool and curing of the slats. The company expect to have pulled wool to offer shortly, and as Nova Scotia wool is of a very desirable grade, they are looking forward to a ready market for it.



Flue Rolling

—is a job that soon shows up fundamental weakness in pneumatic drills. The seven sizes of Little David Air Drills which are particularly adapted for rolling flues from $2\frac{1}{4}$ inches or more, have all the power and stamina necessary to do this work and have been adopted as standard equipment by many of the most prominent makers of stationary and marine boilers in the world.

A complete 8000 series Little David Air Tool Catalogue contains nearly 400 pages of pneumatic tool information that should be in the files of the Purchasing Agent of every metal working plant in Canada.

CANADIAN INGERSOLL-RAND COMPANY, LIMITED

Largest Makers of Pneumatic Equipment in the British Empire

Sydney
Cobalt

Sherbrooke
Winnipeg

Montreal
Nelson

Toronto
Vancouver

Super Cement

St. Mary's Cement Company, Limited, Are Making a New Product

During the current year the St. Mary's Cement Company, Limited, St. Mary's, Ontario, have begun the manufacture of a new product known as super cement. When ordinary Portland cement is used for construction purposes and absolute waterproofness is desired, it is usually considered necessary to mix with it another compound. Super cement is designed to overcome this supposed necessity. It is used in the same manner as Portland cement and the manufacturers state that a greater benefit is obtained than is possible by adding any known compound or material to Portland cement.

The company have made practically no change in their plant for the manufacture of their new product. During the present year super cement has sold at \$1 a barrel above the price of Portland cement, the additional price being due to the special and extra treatment of one of the ingredients. The new product is meeting with the best success in use.

Moving Next Year

Winnipeg Branch of Columbus Rubber Company to Take Over Larger Premises

Early in 1922 the Columbus Rubber Company of Montreal, Limited, Winnipeg Branch, are moving from their present location on Princess Street to larger premises in the Stobart Building, corner of King Street and McDermott Avenue.

The whole of the third floor has been leased for a period of years and when all alterations and improvements have been completed the company will have one of the most up-to-date office, sample and warehouse propositions in the West. George W. Barrett will continue as manager.

The American Metal Polish Company, Montreal, have improved the container of their Puts cream. The new can has an improved slotted cap which facilitates opening. A straight edge inserted in the slot and turned will open it. The company are expecting increased sales.

The Canadian Insulation Company, Limited, Winnipeg, are manufacturing an insulating building material from Western flax straw in their mill at Selkirk, Manitoba. The material is known as "Sealofelt" and is adopted for lining houses, refrigerators cars, ice houses, incubators, etc.

During the past 12 months the Chamberlain & Hookham Meter Company, Limited, Toronto, have developed a graphic demand meter for the measurement of electric power. They have a fairly large order for these instruments on hand from the Hydro-Electric Power Commission of Ontario. This is the first time that demand meters have been made in Canada.

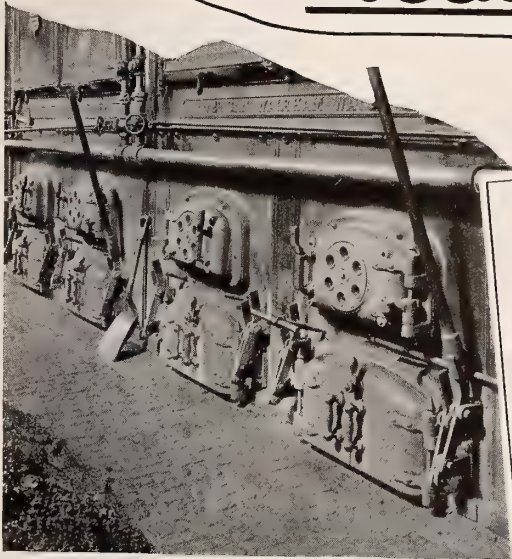
The A. C. Gilbert Menzies Company, Limited, Toronto, are adding magic and puzzles to their list of steel construction and educational toys. The company are resuming business in a moderate way with a South African firm of wholesale distributors but have been unable to get confirmation of some Australian business on account of the difficulty of transferring exchange.

The firm of Lucien Borne, Quebec, announce that they have moved their offices and warehouses from 491 St. Valier St. to 35 Colomb St.

Glassco, Limited, Oakville, Ontario, are of the opinion that general business conditions are improving. They are working nights to catch up with their orders, some of which are very large.

W. H. Banfield & Sons, Limited, Toronto, are finding a rapidly increasing demand for metal stampings and special machine work as well as for their standard lines of phonograph motors, electrical fixtures and supplies. They state that they are looking forward to the increased business which is bound to come.

We have less bother in keeping up a Steady Steam Pressure



Results, such as those listed here, have caused progressive men to select **Files Hand Stokers**. These are typical of the more complete data we have compiled:—

One installation (3600 H.P.) saved enough coal to pay for their stoker investment in five months.

A Files installation operated for five months continuously at an average rating of 223%—doubling their steam output.

Files Stokers increased the efficiency of one plant sufficiently high to warrant discontinuance of two of eight boilers.

Costs of installation and maintenance of Files Stokers are exceedingly low. Yet these costs become insignificant when the numerous advantages to be obtained from them—in addition to decided savings in fuel and labor—are considered and compared with the surprisingly small investment entailed.

Take, for instance, the flexibility of the stoker in responding to load fluctuations. When the need for steam is great or small, Files Stokers operate with the same supreme degree of ease and efficiency. It is a common occurrence for these stokers to economically carry heavy overloads—often as high as 200% of rating—for several months without unnecessary exertion of the boiler room force or the slightest damage to the boilers.

Read Engineer Prue's letter describing his satisfaction with Files Stokers. This is real evidence of the high capacity of the stoker and its ability to easily and rapidly work up into peak loads and high steam pressures, holding these for unusually long periods. Stoker performance of this sort is a much sought for feature—it is universal with Files Stokers.

Here is the ready explanation to these achievements:—

- 1—Complete volatilization of green coal, causing intensified combustion and smoke elimination.
- 2—Correct distribution and proportion of air according to load carried.
- 3—Fuel Bed continuously kept clean, uniform and "rich".

We could mention numerous installations—concerns whose importance is recognized at a glance—that will invariably express the same tone of satisfaction as the Park Spring Dyeing and Bleaching Company; that have found Files Hand Stokers their stepping stone to increased power production at decreased costs.

Given the opportunity, we will be glad to present these facts to your complete satisfaction.



**PARK SPRING
DYEING AND BLEACHING CO.**
INCORPORATED
DYERS, PRINTERS AND WINDERS
WOONSOCKET, R. I., U. S. A.

April 21, 1920.

Frank Mossberg Company,
Lamb Street,
Attleboro, Mass.

Gentlemen:—

In reply to yours of the 20th regarding hand stokers, would say that we have installed one of the Files Engineering Company's stokers under one of our boilers, and same is working out very satisfactorily.

Our fireman is very much pleased with the stoker and is urging that we put in another one. We find that we have less bother in keeping up a steady steam pressure and that we save a percentage on our fuel.

Trusting the above is the information wanted, we beg to remain

Yours very truly,

PARK SPRING DYEING & BLEACHING CO.

F. G. Prue. Manager

FGP/CB

The Waterous Engine Works Company, Ltd.

Brantford, Ontario

Make Good Recovery

Goodyear Tire & Rubber Company of Canada, Limited, in Strong Financial Position

A notable recovery has been made by the Goodyear Tire & Rubber Company of Canada, according to the annual report for the year ended September 30, now being issued to shareholders. A few months ago the company passed their dividend on preferred, and a drastic reorganization followed, together with steps which, it was hoped, would restore the company to a strong position. In the report now issued, it is pointed out by Vice-President and General Manager C. H. Carlisle that the quick liabilities were reduced between June 30 and September 30 by \$777,346, and, in addition, cash balances have been increased from \$209,045 to \$870,275. The principal reduction in current liabilities was in the complete payment of bank loans, which amounted to \$675,338, at June 30. It is interesting to note, as Mr. Carlisle points out, that in the six months since March 31, current liabilities have been reduced by, approximately \$2,900,000.

Net profits of the company, after paying all expenses of manufacturing, selling and distributing, interest on the 8 per cent. three-year notes, and reserving \$95,411 for depreciation of plant, amounted to \$200,128, during the three months ending September 30.

It is pointed out by Mr. Carlisle that the company have no bonded indebtedness, that their assets are entirely free from mortgages, liens or assignments of any nature, and that they have a cash balance of \$870,275, facts which, Mr. Carlisle says, indicate that the company is in a strong financial position.

The following table shows a comparison of the principal items in the balance sheet as at June 30 and September 30 of this year:—

	Sep. 30	June 30
Current and working assets.....	\$ 6,971,830	\$ 8,408,442
Current liabilities.....	1,701,836	2,479,182
Inventories.....	2,985,137	4,287,017
Accounts receivable.....	3,116,417	3,912,380
Cash.....	870,275	209,045
Bank loans.....		675,338
Notes payable.....	330,589	71,161
Acceptance against letters of credit.....		312,778
Accounts payable.....	447,498	540,845
Reserve for taxes, etc.....	923,748	879,009
Total assets.....	14,139,804	15,332,099

The name of Walter Woods & Company, Hamilton and Winnipeg, has been changed to Walter Woods, Limited. The change has been made in order to give an interest in the business to those of the staff who have built it up by their long and faithful service. The original company was founded in 1870 to manufacture wood-ware and grocers' sundries and is now one of the leading houses in that line in Canada.

The Johnson-Richardson Company, Limited, Toronto, announce that for the first time since the war they are in the market with their "J. R. Blue" (for laundry purposes.)

J. Ford & Co., Portneuf, P.Q., have put in a new concrete dam at their No. 2 mill this summer, replacing the old wooden dam and doubling the power.

The Hardwood Lumber Company, Limited, Vancouver, are installing a plant for the manufacture of hardwood flooring in oak, maple, birch and alder. They expect to have their samples ready shortly.

Russel Brothers, Limited, Fort Frances, Ontario, have for the past eight years been building warping tugs, equipped with gasoline motors, for towing logs and pulp wood. As a number of lumbermen are opposed to the use of gasoline motors on their drives, the company are now supplying these tugs equipped with either the gasoline motors or with a two cylinder high pressure steam engine and boiler.

Bennett, Limited, Chambly Canton, Quebec, have added a new product known as Bennett Bindersboard to their line. This is a millboard and a new Canadian product.

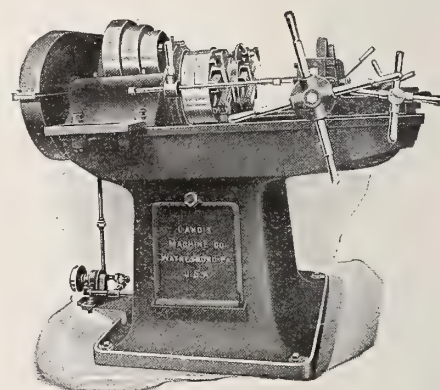
A fire which broke out at the plant of the anadian Milk Products Company at Brownsville, Ontario, on October 24th, was stopped by the quick work of a bucket brigade. The flames broke out in a barn near the plant and spread to the drying room. After a couple of hours of hard fighting the fire was extinguished, the machinery escaping unharmed, though a considerable amount of belting was damaged. The buildings are valued at \$500,000.

Landis Threading Machines

LANDIS Belt and Pipe Threading Machines do better work in less time because of the distinctive design of the Landis Chaser, which operates in the same manner as a lathe tool. Placed at a tangent to the work it allows the machine to operate at a higher speed than is possible when a hobbled type of die is used.

Landis Thread-Cutting Machines are considered, standard equipment by leading manufacturers, whose hardest jobs they handle with complete satisfaction.

We are the Canadian Representatives and our nearest Branch will gladly send detailed information.



The Canadian Fairbanks-Morse Co., Limited

Canada's Departmental House for Mechanical Goods

Halifax
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Windsor
Fort William

Winnipeg
Regina
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When Factories "Slow Down" - *Look Over the Belting*

When your factory gets into its stride with the upturn of good times, you do not want to stop for repairs to Belting. Now is the time to look over your equipment and put your Belting in trim. If you need NEW Belting, do not overlook the fact that

"P. M. S." BELTING

has proven by experience to be the strongest, most durable, and to suit the most difficult drives.

If you have Transmission Problems, let one of our Belting Engineers consult with you.

Gutta Percha & Rubber, Ltd.

HEAD OFFICES AND FACTORY: TORONTO

BRANCHES IN ALL LEADING CANADIAN CITIES

Good Equipment *gives* Better Service

KITCHEN Equipment is subjected to severe tests. Cooks and helpers are more or less indifferent to the cost of upkeep. They expect it to function under any or every handicap.

Meals are run on schedule. The Factory whistle sounds—a moment later a stream of employees are waiting to be served.

It is the supreme test. Hunger offers no sympathy—moments are precious, men look for instant service.

Good equipment can be relied upon. Frankly, it is the only equipment of this standard that we have to offer.

Anything within the Kitchen is included in our range of supply. We have recently issued a complete Catalog furnishing detailed information. It is yours for the asking.

The Garland Range, a leading feature of our line.

McClary's

*"Make Good Stoves and
Cooking Utensils"*

Head Office and Factories: LONDON, ONT.

Branch Offices and Warehouses:
Toronto, Montreal, Winnipeg, Vancouver,
St. John, N.B., Hamilton, Calgary,
Saskatoon, Edmonton

Are Building Addition

T. Sisman Shoe Company, Limited, Erecting New Three-Storey Building

As considerable congestion has occurred in their old factory building the T. Sisman Shoe Company, Limited, Aurora, Ontario, are increasing their output approximately 50 per cent. An improved stairway is being built to make the building absolutely fireproof and in general construction and equipment, sprinklers, etc., it will conform to the present plant.

The company report that they are running to capacity and are still unable to cope with orders coming in, but they expect to have some relief in the next few months when the extension is completed.

A branch of the factory has also been opened in Newmarket, Ontario, with full equipment for the fitting of uppers. For the first few months about twenty or twenty-five girls will be employed and as business improves some male help will also be required.

Canadian-made Nailer

P. B. Yates Machine Company, Limited, Turning Out New Product

A new "Made-in-Canada" product, recently placed on the market by the P. B. Yates Machine Company, Limited, Hamilton, Ontario, is a nailing machine. The machine is built in two different styles, the open back and closed back type, and in a number of different sizes.

The company state that it is possible to nail together the sides and ends of 1500 to 1800 boxes of ordinary sizes in a day and also that it is possible to nail on from 1200 to 1500 lids a day. The capacity of these machines, however, largely depends on the operator.

Though the P. B. Yates Company specialize in the manufacture of wood-working machinery, the nailing machines are suitable for any plant making their own boxes. The new product is made entirely in their Hamilton plant, from raw material to the finished machine ready for installation.

Alberta Coal Fields

Syndicate Being Formed to Produce Briquettes in Edmonton District

A syndicate is being formed with Lord Morris, former premier of Newfoundland, at its head, to take up the development of Alberta coal resources, according to the Last West, the publication of the Industrial and Research Department of the C. N. R. The syndicate proposes to acquire a coal mine in the Edmonton district and transform the coal into briquettes.

Making Electric Products

Continental Electric Company, Limited are Incorporated With Headquarters in Toronto

The Continental Electric Company, Limited, have been incorporated with headquarters at 505-511 King street east, Toronto, to manufacture Royal Electric Products in Canada. This line includes suction cleaners, vibrators, hair dryers, hair clippers, washing machines and other electric labour-saving devices. The company have 7,000 square feet of floor space and have started operations with ten employees. As soon as the business gets under way this number will be augmented as arrangements have been made for an increased capacity of plant.

Whitby Plant Opened

Brick and Clay Company, Limited, Revival of Former Flourishing Industry

The new plant of the Brick & Clay Company, Limited, at Whitby, Ontario, was opened on September 16th, by Mayor Hopper, who made an address and started the machinery. In his address the Mayor reminded the citizens that the new plant was a revival of an industry that had flourished in the town some 60 years ago. The company will employ about seventy-five men when the plant is running at full capacity.



Where Do You Use Grinding Wheels?

Norton **Alundum** and **Crystolon** grinding wheels

are used today for thousands of jobs where other methods were formerly considered best.

With our several artificial abrasives to select from, each especially fitted for certain kinds of grinding, plus a long range of grit sizes and grades, chosen by us to give best service for each operation, manufacturers find that "grinding" is quicker and generally more satisfactory for their work.

From our many years of experience we are familiar with these developments and are in a position to tell you whether or not grinding would be more practical and more economical for work like yours than your present practice would be.

Let us offer suggestions in your case. Explain your work to us; let us give you the benefit of our experience.

Perhaps Norton Alundum wheels, Norton Crystolon wheels or Norton Alundum polishing grain can reduce your manufacturing costs.

NORTON COMPANY OF CANADA, LIMITED

HAMILTON - - ONTARIO

Electric Furnace Plant, CHIPPAWA, ONTARIO, CANADA

CANADIAN AGENTS:

The Canadian Fairbanks-Morse Co., Ltd., Montreal, Toronto, Ottawa, St. John, N.B., Winnipeg, Calgary, Saskatoon, Vancouver,
Victoria. F. H. Andrews & Son, Quebec, Que. Simonds Canada Saw Co., Vancouver, B.C.

Silk Throwing Plant

Textile Manufacturing Company, Limited, Toronto, Extend Their Business

In their recently purchased property at 12 Mark Street, Toronto, the Textile Manufacturing Company, Limited, have installed an entirely new and up to date plant for silk throwing. The new factory is now in operation and the company are in a position to supply neckwear silk, artificial silk twists, etc., to the trade. The Mark Street plant is known as factory B, factory A and the head office being at 439 Wellington street west.

Monel Metal Castings

St. Catharines Brass Works, Limited, Successful With a New Product

Monel metal castings, a comparatively new alloy in Canada, are now being manufactured at St. Catharines, Ontario, by the St. Catharines Brass Works, Limited. The new castings have the advantage of high tensile strength but do not sacrifice any other important requirement, such as non-corrodibility, resistance to high temperatures or ease of working. The company had difficulties when starting the manufacture of their new product but have been complimented on the success they have attained.

Making Extensions

Thomas Watt Company, Limited, Building and Installing New Machinery.

Extensions are under way at the plant of the Thomas Watt Company, Limited, Vancouver, and machinery is being installed for the manufacture of rivets, bolts, nuts, bag screws, ship-chandlery, etc. The company also intend to enlarge their galvanizing branch so that they may increase their output and make a specialty of galvanized goods. They expect to build up an export business on the Pacific coast in their lines and the new additions will enable them to build up a more lucrative business in the near future.

Scottish Fertilizers, Limited

New Plant at Welland, Ontario, will be in Operation by Next January

Construction of the plant of Scottish Fertilizers, Limited, has commenced at Welland, Ontario, and it is expected that the new year will see it in operation. The plant has been designed by one of the leading chemical engineers of Great Britain and embodies the best ideas of American and English practice. A railway siding connecting with the G. T. R. has been installed. The cost of the factory will be \$100,000.

Scottish Fertilizers, Limited, are a subsidiary of the Cross Fertilizer Company, Limited, of Sydney, Nova Scotia, and are capitalized at \$500,000. The technical end of the business will be handled by W. Gillespie, who comes from Scotland, and the commercial management of A. L. Smith.

Completing Large Contracts

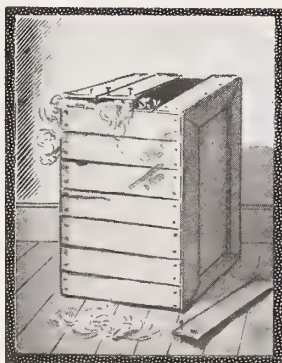
A. B. Ormsby Company, Limited, Toronto, Making Steel Sash and Doors

The A. B. Ormsby Company, Limited, Toronto, are completing the contract for steel sash for the Hydro Electric Power Commission's new power house at Queenston, Ontario. The sash is the largest ever made in Canada, if not in America, the overall size being 21 feet by 38 feet.

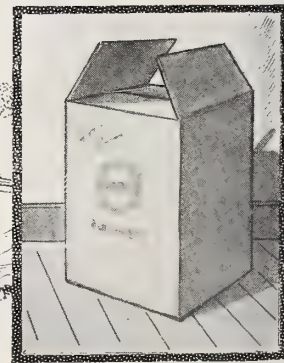
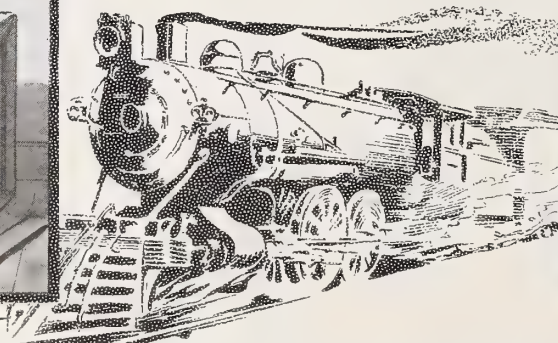
The company have also secured the contract for the motor-driven rolling steel doors which the Toronto Transportation Commission are putting on the new St. Clair Avenue car barns. This contract is a large one and is to be completed by December 1st.

Automatic lathes for the manufacture of wooden sporting goods such as Indian clubs, dumb bells, bar bells, exercising wands, baseball bats, etc., have been installed in the factory of the Harold A. Wilson Company, Limited, Toronto. The company state that the quality and style of these products are first-class and that they are able to manufacture them at a price 25% to 30% lower than that of imported goods.

H. & D. Corrugated and Solid Fibre Board



The Old Way



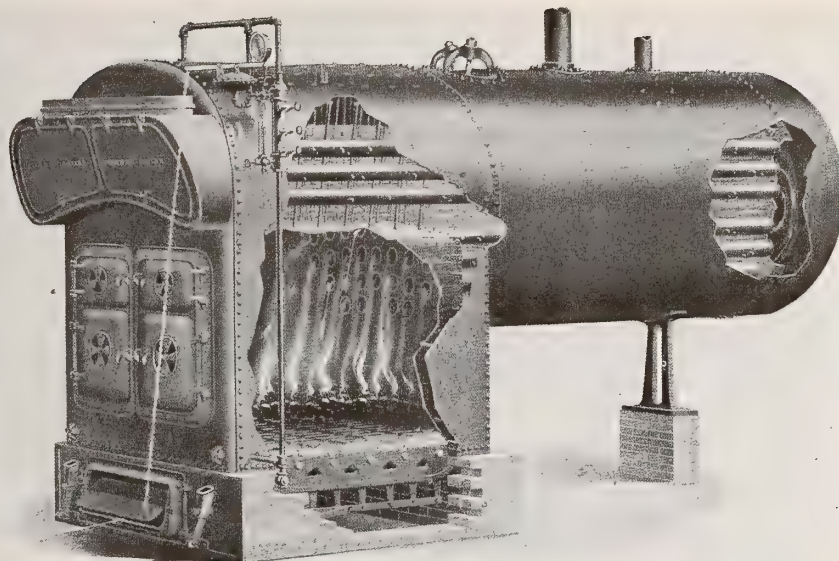
The New Way

CONTAINERS will save on your transportation charges, save your floor space, cut down packing expenses, and give you positive protection against loss from damage and pilfering. Write for prices and samples.

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TORONTO, CANADA

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OF ALL KINDS



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14 STRACHAN AVE., TORONTO, CANADA

Eastern Representatives—JAS. W. PYKE & CO., LIMITED, 232 St. James St., Montreal

Ottawa Representative—J. W. ANDERSON, 7 Bank Street Chambers

Completing Enlargement

Third Addition in Past Few Years of H. H. Crosby Company, Limited

The third enlargement of the plant of the H. H. Crosby Company, Limited, Hebron, Nova Scotia, within the past few years is just being completed. The additional space and equipment will make possible a daily output of from eight to ten hundred pairs of shoes.

The company make a full line of staple shoes and the finer grades of calf, patent leather, gun metals, side leathers, kids, etc., disposing of their entire output to the retail trade in the Maritime Provinces. For twenty-five years, they report, their factory has not been idle a day for want of orders and orders are in sight that will take up the full output when the factory extensions are completed. Profits are shared with employees and no labour troubles have been experienced.

Amherst Plant Re-opens

Canadian Car and Foundry Company, Limited, Receive Large Order

The plant at Amherst, Nova Scotia, of the Canadian Car & Foundry Company, Limited, which has been closed for the last six months is to be re-opened for work on a repair order received from the Canadian National Railways. The order is for the repair of 1,000 cars, 500 of which will be handled at the Amherst plant, giving employment to 20% of the company's regular staff. The remainder will be handled in Montreal.

Moving Next May

Federated Press, Limited, Will Have More Space in Bleury Street, Building

The Federated Press, Limited, who recently acquired the "Belgo" Building on Bleury Street, Montreal, are planing to move their printing and lithographing plant into it next May. The building is an eight-storey structure of reinforced concrete containing over 50,000 square feet of floor space. The Federated Press are

also contemplating the installation of additional equipment in their plant.

One floor of the new premises will be occupied by the Federated Leather Goods Company, Limited, a subsidiary of the Federated Press. They also will increase their facilities for the manufacture of fine leather goods such as ladies' handbags, men's pocketbooks, etc.

Conditions in Kitchener

Some Seasonal Improvement is Noted in Several Lines of Manufacture

The following report has been received on industrial conditions in Kitchener and Waterloo: Rubber footwear—some improvement, some factories taking on additional help; tire industry,—no improvement; leather shoes,—seasonal improvement; tanning,—seasonal improvement; button factories,—working full time on seasonal business; shirts,—one plant has re-opened and others are busy; felt,—a very slight seasonal improvement; furniture,—quite noticeable seasonal improvement; iron works,—quiet; gloves,—seasonal improvement; meat packing,—plants very busy; pianos,—quiet; paper boxes,—slight seasonal improvement; trunks and bags,—improvement noticeable; candies,—usual seasonal improvement; clothing,—quiet; building trades,—busy; brewing and distilling plants,—operating as usual.

Acquire New Premises

I. Johnson & Son, Limited, Toronto, Move to the Canadian Rumley Building

Following a severe fire which completely demolished the old plant at 1536 Dundas St. W., Toronto, I. Johnson & Son, Limited, patternmakers, have moved their business into the northwest corner of the Canadian Rumley Building with entrances from Abell St. and 1147 Queen St. W. They have equipped their new premises with a full line of modern machinery and as their large stock of lumber is still intact they feel able to give even better service and results than in the past.



We Manufacture



Brass, Phosphor Bronze, Copper and Aluminum Castings of every description, any size, any weight. Made from our "Standard Mixtures" or we will make them from any Special Formula.

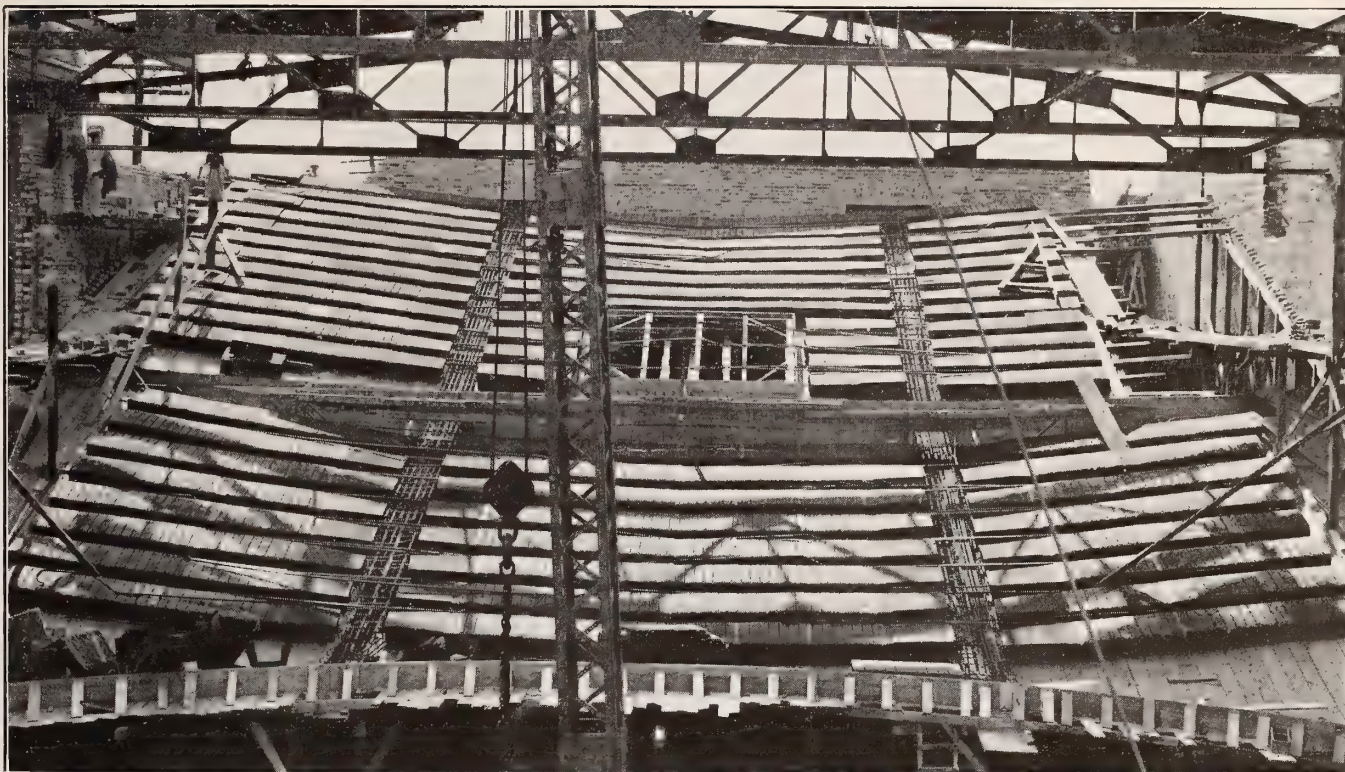
They never fail to test up to the required analysis and never disappoint the user.

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Manufactured by

Tallman Brass & Metal Limited
HAMILTON, ONT.





Sullivan & Fried, Contractors

John Jeffries, Architect

Steel Floretyle over Hyrib used in new Standard Theatre, Toronto

Steel Floretyle Construction



A stack of 50 Floretyles, handled on a two-wheeled truck is equivalent in floor construction to 333 terra cotta tiles weighing 10,000 lbs.

This popular type of reinforced concrete construction consists of rows of specially manufactured hollow steel tile covered with a layer of concrete and separated by reinforced concrete joists, making a series of T beams. These deep, narrow joists carry the loads directly to the supports, while the Floretyles act merely as fillers, saving concrete, reducing dead weight, simplifying centering and economizing construction.

The Steel Floretyle are of special design and manufactured under powerful presses operating large multiple dies, which assure absolute accuracy and uniformity.

To secure greatest stiffness in supporting loads and resisting deformation in shape the Floretyles have extra deep stiffening ribs across the top, are deeply corrugated on the side, have special rounded corners and have additional stiffening flanges along the bottom edges.

The Hyrib extends continuously underneath the Floretyle and provides a flat ceiling with a perfect surface for plastering.

The corrugated flange at the lower edge of the Floretyle straddles the ribs of the Hyrib and fits into its mesh.

Secure our estimates, suggestions and pamphlet.

Trussed Concrete Steel Company of Canada, Limited

WALKERVILLE - ONTARIO

BRANCHES

Toronto, Montreal, Winnipeg, Calgary, Vancouver

WAREHOUSES

Winnipeg, Toronto, Calgary

Reinforcing Steel - Metal Lath - Steel Windows - Building Specialties

Extend Export Trade

Canadian Carbonate Limited, Send Their Product to South America and the Orient

Canadian Carbonate Limited, Montreal, report that in addition to their West Indian export trade, they are now shipping to the South American market and to the Orient. They are also supplying carbonic acid gas to dairies and ice cream factories throughout Canada for carbonating ice cream and butter by the Heathmade process. In order to cope with increased business, it has been necessary for them to place a large order for an additional supply of gas containers.

Are Specializing

Chas. A. Arhens, Limited, Discontinue Manufacture of Men's and Women's Shoes

Chas. A. Arhens, Limited, shoe manufacturers of Kitchener, Ontario, have discontinued the manufacture of men's and women's shoes and are specializing on the production of shoes for children, boys and girls. In all sizes larger than 10½ the Goodyear Welt construction only will be used. For the smaller sizes, 3 to 10½, the Stitchdown Welt construction has been adopted. These changes will improve the company's product and will enable them to compete more effectively with shoe manufacturers in the United States whose exportations to Canada are largely of this class.

Steel Foundry Department

J. W. Cumming Manufacturing Company, Limited, Increase Their Facilities

A new building, 181 x 54 feet, has been erected to house the steel foundry department of the J. W. Cumming Manufacturing Company, Limited, New Glasgow, Nova Scotia. The new department has now been in successful operation for six months and the electric steel furnace has a capacity of 3,500 pounds per heat. Miscellaneous casting, anchors, anvils, manganese steel mine car

wheels, toughened steel mine car wheels, self-oiling wheels and bearings are manufactured.

Making New Products

Ames Holden McCready, Limited, Make Additions to Their Rubber Lines.

The Rubber Section of Ames Holden McCready, Limited, Montreal, have added the following products to their line: Rubber heels for men and women, cushion heels and feather edge heels for boudoir slippers. They are also making a full line of cements for the leather shoe trade and a full line of cements for use in connection with tires and tubes. Confectioners' rubber lined bags, type-writer covers and fibre heels are other new products of the company.

New Stock Room

Canadian Drawn Steel Company, Limited, Hamilton, Complete Important Addition

A new rough stock room for handling new material has recently been completed at the works of the Canadian Drawn Steel Company, Limited, Hamilton, Ontario. Its dimensions are 215x54 feet in length and width, and 28 feet high to the bottom of the truss. An overhead electric travelling crane, passing over the C. P. R. tracks at the south and the G. T. R. tracks at the north, gives excellent facilities for quick and economical unloading of raw material.

The company also have a very heavy new drawing machine on the way but the erection of this has been stopped for a time.

In addition to their regular lines of superheaters for locomotive, marine and stationary service, and pipe coils for all purposes, the Superheater Company, Limited, Montreal, have entered the market with a feed water heater for locomotive use. This equipment is of the closed type and is giving satisfactory service wherever it has been installed.

J. L. MOON, President

L. W. FRICKE, Vice-President

J. S. BRACKEN, General Manager

L. W. JUST, Secretary-Treasurer

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The Pioneer Appraisal Organization of Canada

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By this service we maintain an appraisal when once made at all times up-to-date and in accordance with actual facts both as to the property existing and to the value of the same from time to time. It is carried out annually and at a relatively small cost.

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BRASS, COPPER & NICKEL SILVER

in Rods, Rolls
and Sheets



BROWN'S
COPPER & BRASS ROLLING MILLS
NEW TORONTO, ONT. LIMITED

Building Lime Kilns

Bathurst Lumber Company, Limited, Will Produce Their Own Lime by Christmas

The Bathurst Lumber Company, Limited, Bathurst, New Brunswick, are building two lime kilns on the wharf adjoining their mill property. In a statement made to the *Pulp and Paper Magazine*, Angus McLean, president of the company, predicted that the kilns will be ready for the manufacture of lime by Christmas and that thereafter, instead of shipping in lime, they will be able to produce their own.

The rock will be obtained from the company's quarry at Port Daniel, Quebec, and shipped across the bay in scows. Unnecessary labor is eliminated as the kilns are being built on the wharf. They will have a capacity of from 25 to 30 tons a day.

New Baling Press

Climax Baler Company, Hamilton, Making Press For Baling Planer Shavings

The Climax Baler Company of Hamilton, Ontario, are manufacturing a new steel baling press for baling wood planer shavings. The machine, which is a new product for Canada, is operated by an electric motor or a belt and has a daily capacity of 150 bales.

There is a steady demand for baled wood shavings, and planing mills who have been in the habit of throwing away or burning their shavings can now realize a profit on them through the use of this machine, which, the makers claim, will soon pay for itself.

Hemp Growing in Canada

Production in Manitoba Makes Probable the Erection of Factories Soon

Five hundred tons of hemp will be harvested from the crop grown by Manitoba farmers under the direction of the Canadian Fibre Company, Limited. It comes from the Swan Lake and Portage districts where there has been a splendid yield.

The hemp will be shipped to Great Britain for manufacture, as

last year's crop realized good prices there. Now that it has been demonstrated that hemp can be successfully grown in Manitoba it is expected that factories will be established soon for the manufacture of products from the hemp fibre.

Duro Aluminum, Limited

W. D. Shambrook & Company, Limited, Have Changed Their Name

Duro Aluminum, Limited, have taken over the business of W. D. Shambrook & Company, Limited, Hamilton, Ontario. The new company capitalized at \$200,000 under a Dominion charter, will be carried on under the same management and policy as the old, making a full line of aluminum kitchen utensils and household specialties under the trade mark "Duro." They are at present working full time in all departments.

Add New Lines

Interprovincial Limited, a Quebec Company, Take Up Manufacture of Wooden Ware and Specialties

Interprovincial, Limited, St. Pie, Bagot Co., Quebec, enlarged their plant this year by adding a brick building 145x45 feet, two stories and also eight more or less important annexes. Besides their principal line, viz., caskets and casket hardware, they have started a department for the manufacture of wooden wares and specialties, handles, etc.

New Factory Opened

David A. McCowan, Toronto, Extending Mechanical Toy Lines and Hardware

David A. McCowan, novelty manufacturer, Toronto, started operations in his new factory at 83-85 Main Street, on October 1st. The old building at 21 Main Street was vacated on October 5th. The new plant is a solid brick building containing over 5,000 square feet of floor space. Its use will enable the firm to extend its mechanical toy lines and hardware business.

What Does Your Broker Do for You?

IT is not generally known that the giving or receiving of rebates on insurance is a criminal offence. The law, however, does not prohibit a broker from using a large percentage of his commissions in maintaining for your benefit a staff able to:

Watch the fluctuations in your values and calculate accurately the amount of insurance necessary for your protection.

Make regular and careful inspections of your plant, show you how your rate can be reduced and prevent you from doing anything which might void your policies.

Select from the many insurance companies those which will give you the best terms and quickest settlements.

Come to your assistance immediately a loss occurs, help you in preparing your claim statements and make sure that you receive everything to which you are entitled.

Watch your insurance interests so vigilantly as to relieve you of all care and anxiety in that direction.

If this is the kind of service you want, we can give it to you.

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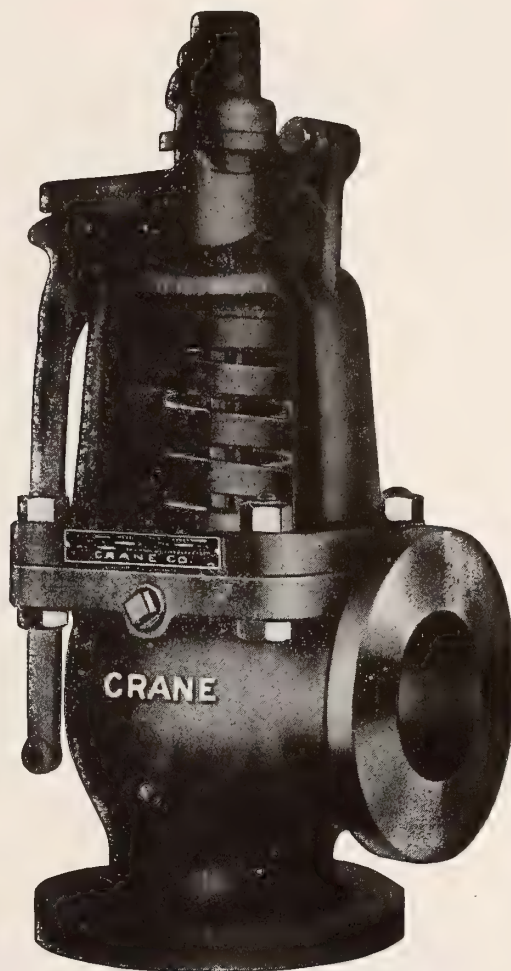
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TORONTO.

OF CANADA, LIMITED,
MONTREAL.

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MANAGERS, C.M.A. INSURANCE DEPT.

CRANE

CRANE



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High Capacity Pop Safety Valves

Have the highest possible relieving capacities; high lifts without attendant shocks; and comply with all existing codes, laws and specifications. Only the best material is used in all parts; made in sizes 1½ inch to 4½ inch—iron body or cast steel.

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MANCHESTER, BIRMINGHAM.

Enlarging Their Capital

Melotone Talking Machine Co., Limited, Winnipeg, Are Raising More Working Capital

The Melotone Talking Machine Co., Limited, Winnipeg, are raising new capital by the sale of \$50,000 eight per cent. preferred stock, which will be invested in stock for the factory including lumber and hardware and will also provide increased working capital. None will be invested in machinery, the company being already well equipped.

The company were formed in 1915 and at present employ 30 men. They are, with one exception the oldest company in the Dominion, manufacturing phonographs, and the only one in Western Canada. They are housed in a substantial building at 61 Heaton Street. With the new stock, they will have a capitalization of \$200,000, of which \$50,000 will be preferred and \$150,000 common. Among the directors are: Mandel Lurie, President; W. G. Fordyce, Secretary-Treasurer; and J. L. McCormick.

Business is Good

American La France Fire Engine Company of Canada, Limited, are Doing Well.

"Our business for the year is ahead of 1920 business. An average volume of business is coming in daily and prospects for 1922 are up to normal if not a little better than previous years," state the American La France Fire Engine Company of Canada, Limited, Toronto.

The company are completing a new type of hand-drawn gasoline fire engine, intended for use in villages, summer resorts, institutions and forestry service.

Pulp and Paper

August Exports Show Decrease From August, 1920, But Increases Over July

Canadian pulp and paper exports for August reached a total value of \$9,395,391, a decline of \$8,863,336, as compared with

August, 1920, but an increase of \$2,628,835 over the preceding month of July. They were the highest for any month of the current fiscal year and appear to confirm the view that the tide has definitely turned in an upward direction. The shrinkage under last year's figures is more apparent in values than in volume as the following statement shows:

	Cwts.	Aug., 1920	Cwts.	Aug., 1921
Book Paper.....	5,594	\$ 64,293	964	\$ 11,349
Newsprint.....	1,419,028	7,301,605	1,306,429	6,015,305
Other Paper.....		1,380,919		223,683
		\$8,746,817		\$6,250,337

A comparison of pulp exports for the two months shows:

	Cwts.	Aug., 1920	Cwts.	Aug., 1921
Sulphate.....	267,418	\$1,284,365	152,674	\$ 587,664
Bl. Sulphite.....	191,690	1,598,001	187,945	834,445
Unbleached Sulphite.....	574,343	3,820,278	144,518	489,261
Groundwood.....	816,081	2,809,266	435,955	1,233,684
	1,949,532	\$9,511,910	1,849,532	\$3,145,054

Countries of destination were: Paper, United Kingdom, \$79,511; United States, \$5,641,274; other countries, \$529,552. Pulp, United Kingdom, \$879,354; United States, \$1,909,491; other countries, \$356,209. For the first 5 months of the current fiscal year the comparative figures are:

	Paper	Pulp	Total
1921.....	\$27,604,901	\$12,121,729	\$39,726,640
1920.....	35,170,271	35,582,503	70,752,774
1919.....	22,531,667	12,883,748	35,415,415

Pulpwood to the amount of 87,379 cords, valued at \$1,178,038 was shipped to the United States during August, compared with 133,464 cords, valued at \$1,695,038, in August, 1920. During the 5 months' period the volume and value of pulpwood exported to the United States was as follows: 1921, 371,780 cords, valued at \$4,882,365; 1920, \$502,315 cords, valued at \$5,756,464; 1919, 425,974 cords, valued at \$4,205,118.

The plant of the Douglas Packing Company at Cobourg, Ontario, resumed operations during the first week of October. On account of the large supply of apples available a good season is anticipated.



The Right Size Motor for Your Requirements

Oversized motors waste power—undersized motors burn out. Don't trust to chance in the selection of power equipment when you can have the advice of Hydro engineers free for the asking. A telephone call or letter will bring a Hydro engineer to see you.

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TELEPHONE ADELAIDE 2120

Steel Barrels

that do not leak.
Adopt the modern
package.



*Made in
Canada*

*Made to Give
Hard Service*

The Smart-Turner Machine Co., Limited, Hamilton, Canada

The MONTREAL COTTONS LIMITED

MANUFACTURERS OF

WHITE VICTORIA LAWNS

WHITE NAINSOOKS

and

DYED COTTONS

OF EVERY DESCRIPTION

Before the Days of Dollars and Cents.

If it seems difficult in this day to turn our Canadian dollars into terms of pounds, shillings and pence, imagine the confusion back in 1858 when the Canadian Government adopted the decimal system and business first had to be done on the dollars and cents basis. One of the first commodities to be bought for the new money--the now familiar dollar--was Macdonald's tobacco.

For at that early date was also established by Macdonald's a new standard in tobaccos which has become almost as familiar to Canadians as the currency itself.

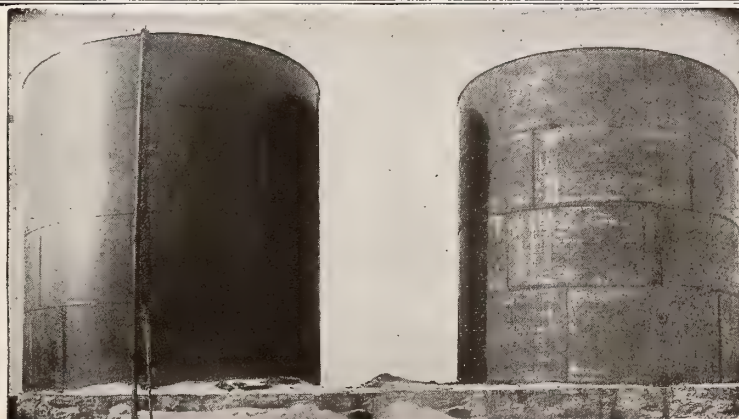
The Tobacco with a heart

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STEEL
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OF ALL KINDS**

**WE ALSO DESIGN,
MANUFACTURE AND
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**STRUCTURAL
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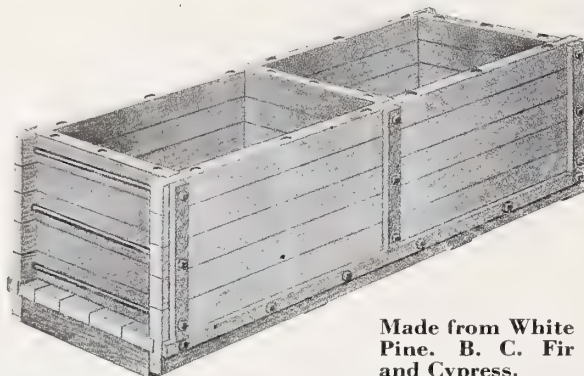
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Musical Instrument Industry**Dominion Bureau of Statistics Issues Report on Operations During 1919.**

The Census of Industry Division of the Dominion Bureau of Statistics has issued a report on the musical instrument industry in Canada in 1919. The statistics are entered under three heads, namely:— (1) musical instruments, including pianos, organs, etc., (2) musical instrument materials and (3) phonographs, cabinets and records. The operations of 72 plants operating in the Dominion during the year under review are surveyed. Following are the principal statistics:

Number of plants.....	72
Musical instruments.....	41
Musical instrument materials.....	11
Phonographs, cabinets and records.....	30
Value of Production.....	
Musical instruments.....	\$ 8,477,866
Musical instrument materials.....	\$ 2,294,577
Phonographs, etc.....	\$ 6,536,835
Capital invested.....	\$15,136,075
Land, buildings, etc.....	\$ 3,377,712
Machinery and tools.....	\$ 1,476,594
Materials on hand, etc.....	\$ 5,845,736
Cash and accounts.....	\$ 4,436,033
Cash and accounts.....	\$ 4,436,033
Number of employees.....	
Class of Industry.....	Male Female Wages
Musical instruments.....	2,592 77 \$ 2,503,209
Musical instrument materials.....	634 128 \$ 677,726
Phonographs, etc.....	1,187 242 \$ 1,196,768
Cost of materials used.....	\$ 3,959,419
Cost of Materials used.....	
Musical instruments.....	\$ 3,959,419
Musical instrument materials.....	\$ 1,037,601
Phonographs, etc.....	\$ 2,503,026
Fuel consumption (value).....	
Musical instruments.....	\$ 53,861
Musical instrument materials.....	\$ 18,461
Phonographs, etc.....	\$ 36,185
Miscellaneous Expenses.....	
Musical instruments.....	\$ 766,950
Musical instruments material.....	\$ 366,545
Phonographs, etc.....	\$ 1,737,243
Value of exports.....	\$ 425,439
Value of imports.....	\$ 3,933,207

Open Branch in Brazil**Canadian Bank of Commerce About to Locate Branch in City of Rio de Janeiro**

The Canadian Bank of Commerce are about to open a branch in Rio de Janeiro, capital and principal city of Brazil. Canada's trade with Brazil, although it has grown from \$573,000 in 1904 to \$4,677,000 in 1920, is still in its infancy and the wonderful resources and great fertility of the Republic promise a steadily expanding market in which Canada should be an active participant.

The adverse exchange situation, the over production (the result of heavy war demands) from which Brazil is suffering, and the trade depression general in the Americas, militate against an exchange of products at the present time but these conditions will gradually adjust themselves. Direct representation in Brazil by a Canadian Bank will prove an advantage to exporters in meeting the keen competition which will arise with the revival of trade.

The Imperial Varnish & Color Company, Limited, Toronto, have completed an addition to their box-making department, and have added sufficient space and equipment to enable them to make their own colour cards and the greater bulk of their advertising material.

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Forest Burning Penalized

Provincial Authorities are now Inflicting Severe Penalties on the Careless and Indifferent

Negligence that results in forest fires is now being punished by the courts with heavy fines and imprisonment. A few days ago five fishermen appeared before the magistrate at Woodstock, New Brunswick, charged with leaving a campfire burning and causing thereby a heavy loss in timber. The magistrate fined them fifty dollars each. A settler at Sudbury, Ontario, was sent to jail for carelessness in burning his brush piles. Quebec magistrates have made many such sentences in the interests of forest fire prevention, but the Sudbury case marks the commencement of more vigorous treatment of Ontario offenders.

The greater part of the timbered area of Ontario is the property of the Ontario Government and losses through forest fires are a direct loss to the people as a whole. Contrary to an all too common belief, the quantity of timber growing in Ontario is not more than sufficient to maintain the present number of forest industries. Ontario, in truth, has not a single acre of timber to waste. Every body of timber may be regarded as an 'incubator' of employment, and as a filler of pay envelopes. To cause a forest fire is to destroy the raw materials out of which the bulk of employment in the Northland must be derived. In the pulp and paper industry of Ontario, alone, the spruce forests create a wage list that runs every year in excess of 11 million dollars.

Spruce, a Great Asset

Demands of Newspaper Publishers Ensure Tremendous Consumption of Canada's Spruce Wood

Northern Ontario has much fine farm land but fully ninety per cent of the whole area is fixed by natural laws as a timber growing estate. One crop will grow thereon—Timber. Fifty years ago, about the only piece of timber that spelled Value was White Pine. Since then the huge development of the pulp and paper industry has put a premium upon spruce. Temporary dullness

in the pulpwood market at the present moment does not affect the fact that the selling price of spruce logs is certain to reach another high figure in the very near future. The fact that the American and Canadian publishers turn out 40 million papers daily and must have as raw material annually a pile of spruce wood nine thousand miles long, four feet high and four feet wide, is sufficient assurance that Ontario's spruce forest represents an asset of supreme value in the world market.

Forest fires have made such inroads upon Ontario's spruce domain that no citizen having the province's interests at heart can refrain from adopting every sensible precaution in his personal conduct. Unextinguished camp fires, lighted matches and tobacco have robbed the province of millions of dollars of public-owned property. To leave a camp fire burning while in or near standing timber is a plain invitation to a disaster. The lighted match and the cigarette are in the same category. Settlers' clearing fires are, according to official reports, the chief source of timber loss. The land of the settler must be cleared and fire is a necessary agent in that process. The Ontario law prescribes a method by which such fires shall be controlled. Neglect of such control endangers the life and property of every neighbor.

The St. Lawrence Furniture Company, Riviere du Loup, Quebec, have installed a turbine and generator to develop 350 h.p. for their own use, and state that they would be willing to sell half of this power at a low price to any industry that would build a factory close to their own.

McColl Brothers Limited, Toronto, are erecting a large new gasoline storage tank at their main premises, 114 Don Esplanade for which a special permit was required from the City Council. This is for the purpose of storing their new Hi-Test Marathon Aero gasoline, which they started to market on May 24 last. They have now tank trucks operating in Toronto, London, Harrison and Montreal.



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DISSOLVED ACETYLENE

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Our chain of plants and warehouses insures a never-failing and prompt supply of this most useful of gases in any quantity everywhere.

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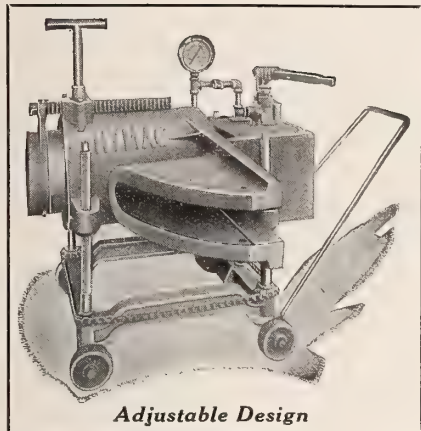
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75—100—150—250—300 TON CAPACITY
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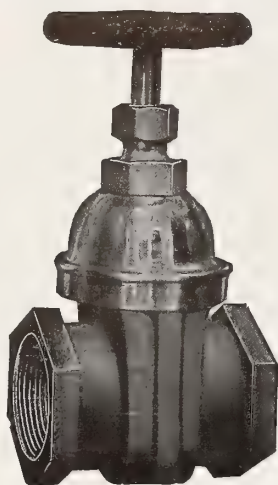
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Steamship Sailings

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WELLAND COUNTY I. C. Transports Ltd. Ab't Nov. 19
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CANADIAN HUNTER C. G. M. M. Ltd. Ab't Nov. 30
MINNEDOSA (Cold Stge) Can. Pac. S.S. Ltd. Ab't Nov. 35

To London

LISGAR COUNTY I. C. Transports Ltd. Ab't Nov. 19
VINDELIA (Sirocco Fans) Cunard Line Ab't Nov. 25
BRANT(COUNTY) I. C. Transports Ltd. Ab't Nov. 26

To Glasgow

PRETORIAN (Cold Stge) Can. Pac. S.S. Ltd. Ab't Nov. 19
CASSANDRA (Cold Stge) Anc-Don. Line Ab't Nov. 19

To Avonmouth Dock (Bristol)

WELSHMAN (Cold Stge) White Star Dom. Line Ab't Nov. 19

To Manchester

A STEAMER Manchester Line Late Nov.

To Newcastle-on-Tyne and Leith

CAIRNDHU (Sirocco Fans) Cairns-Thomson Line Ab't Nov. 20

To Belfast

*LORD ANTRIM Head Line Ab't Nov. 26
*Cargo accepted for transhipment to Londonderry.

To Antwerp

†CORSIKAN (Cold Stge) Can. Pac. S.S. Ltd. Ab't Nov. 26
†Via Southampton

To Dublin

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To Australian and New Zealand Ports

CANADIAN VICTOR C. G. M. M. Ltd. Ab't Nov. 20

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To Liverpool

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*EMPRESS FRANCE (Cold Stge) Can. Pac. S.S. Ltd. Ab't Dec. 13
CANADIAN EXPLORER C. G. M. M. Ltd. Ab't Dec. 14
*MELITA (Cold Stge) Can. Pac. S.S. Ltd. Ab't Dec. 22
CANADIAN COMMANDER (CS) C. G. M. M. Ltd. Ab't Dec. 28

To London

*BOLINGBROKE (Sirocco Fans) Can. Pac. S.S. Ltd. Ab't Dec. 1
CANADIAN RAIDER C. G. M. M. Ltd. Ab't Dec. 7
CANADIAN TRAPPER C. G. M. M. Ltd. Ab't Dec. 21
*BATSFORD (Sirocco Fans) Can. Pac. S.S. Ltd. Ab't Dec. 9
*BOSWORTH (Sirocco Fans) Can. Pac. S.S. Ltd. Ab't Dec. 23

To Glasgow

*TUNISIAN (Cold Stge) Can. Pac. S.S. Ltd. Ab't Dec. 3
SALACIA (Sirocco Fans) Anc. Don. Line Ab't Dec. 5
*BOTHWELL (Sirocco Fans) Can. Pac. S.S. Line Ab't Dec. 13
CANADIAN AVIATOR C. G. M. M. Ltd. Ab't Nov. 17
*PRETORIAN (Cold Stge) Can. Pac. S.S. Ltd. Ab't Dec. 28

To Avonmouth

SALACIA (Sirocco Fans) Anc-Don. Line Ab't Dec. 5
*BOTHWELL (Sirocco Fans) Can. Pac. S.S. Ltd. Ab't Dec. 13

To Belfast and Dublin

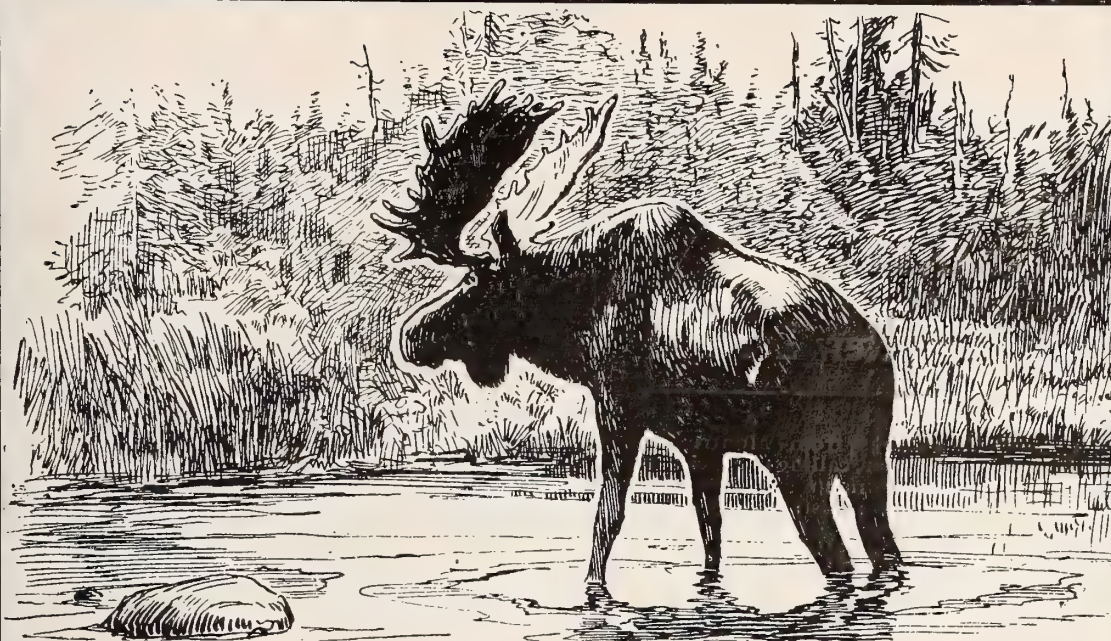
¶FANAD HEAD Head Line Ab't Dec. 10
¶Cargo accepted for Cork and Londonderry.

To Antwerp

*§SCANDINAVIAN (Cold Stge) Can. Pac. S.S. Ltd. Ab't Dec. 24
§Via Southampton.

To Italian Ports

*†CASERTA Can. Pac. S.S. Ltd. Ab't Dec. 7
†Naples and Genoa.
*†SICILIAN (Cold Stge) Can. Pac. S.S. Ltd. Ab't Dec. 5
†Via Boston. *Sail from West St. John.



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WHEN the days begin to have that unmistakable fall "tang"—when you shiver more than a trifle if you leave your coat home nights—when the leaves are turning brown quicker than you can watch them—right then you feel that impulse to climb into that old khaki suit, to pull on those old knee boots, and to fondle that fine little old rifle—

AND to get up north where the big fellows are—moose, deer, caribou and bear, at your choice according to locality. Why not? The backwoods of Ontario are calling you to a real fall hunter's holiday.

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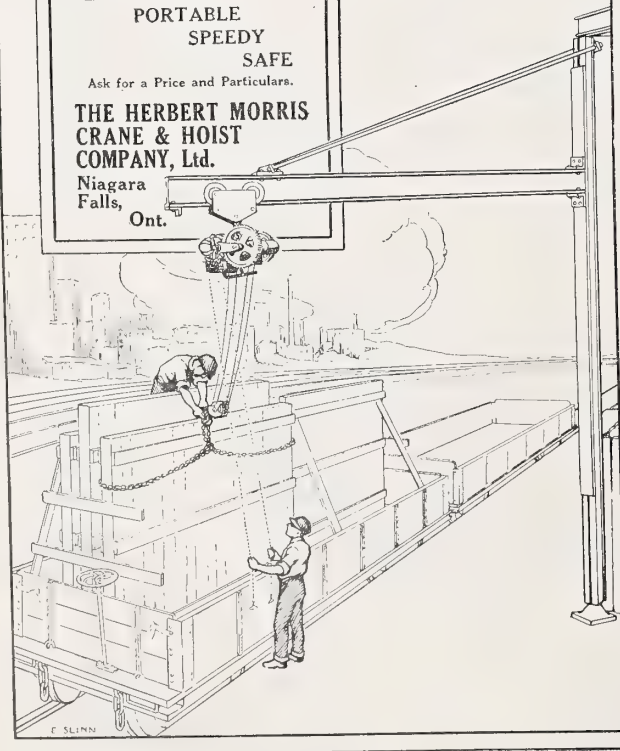
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ECONOMICAL
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Ask for a Price and Particulars.

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 CRANE & HOIST
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Acquire French Freighters

Mathews Steamship Company, Toronto, Make Addition to Great Lakes Fleet.

Nine French freighters are crossing the Atlantic to join the fleet of the Mathews Steamship Company, of Toronto. The deal for these ships, formerly known as the Wolverine fleet, implying an expenditure of about \$2,500,000, was consummated recently by A. E. Mathews, president and general manager of the company, who recently returned from France after making an inspection of the vessels. These vessels, which have been trading in European waters since the close of the war, were constructed for the French Government during the period of the war, and carried large supplies of munitions between New York, London and France.

The ships were built in the United States and were subsequently registered in England. With the arrival of these vessels in Toronto before the close of navigation, they will be assigned by the company for use on Upper Lakes, bringing the fleet of the Mathews Company up to nineteen vessels. It is stated that a further deal is pending for the purchase of another batch of French freighters which Mr. Mathews intends adding to his fleet which now ranks as the largest of the few independent steamship concerns now operating on the Great Lakes.

Three of the new freighters, which will be renamed when they reach Toronto, are expected to arrive in Montreal very soon. They carry a cargo of pulp loaded at New Carlisle. The remaining six ships will follow almost immediately with general cargoes now being loaded in France for prominent Toronto and Montreal firms. They are full canal-sized vessels and are equipped with wireless and other equipment necessary in the trans-Atlantic service.

Mr. Mathews also announced the acquisition of the steamer Bayton, a 416-footer, formerly the Francis Wilder, which will make her initial trip from the head of the lakes on November 10th. At present the Bayton is in the dry dock at Port Arthur undergoing extensive alterations. The Francis Wilder, which was wrecked a year ago on Pancake Shoals, Lake Superior, was salvaged by the Mathews Company, and goes back into service with an A1 rating in Lloyds. The Bayton will be used in the grain trade, and will be commanded by Captain W. J. Kirkwood, formerly master of the steamer Yorkton, of the Mathews' fleet.

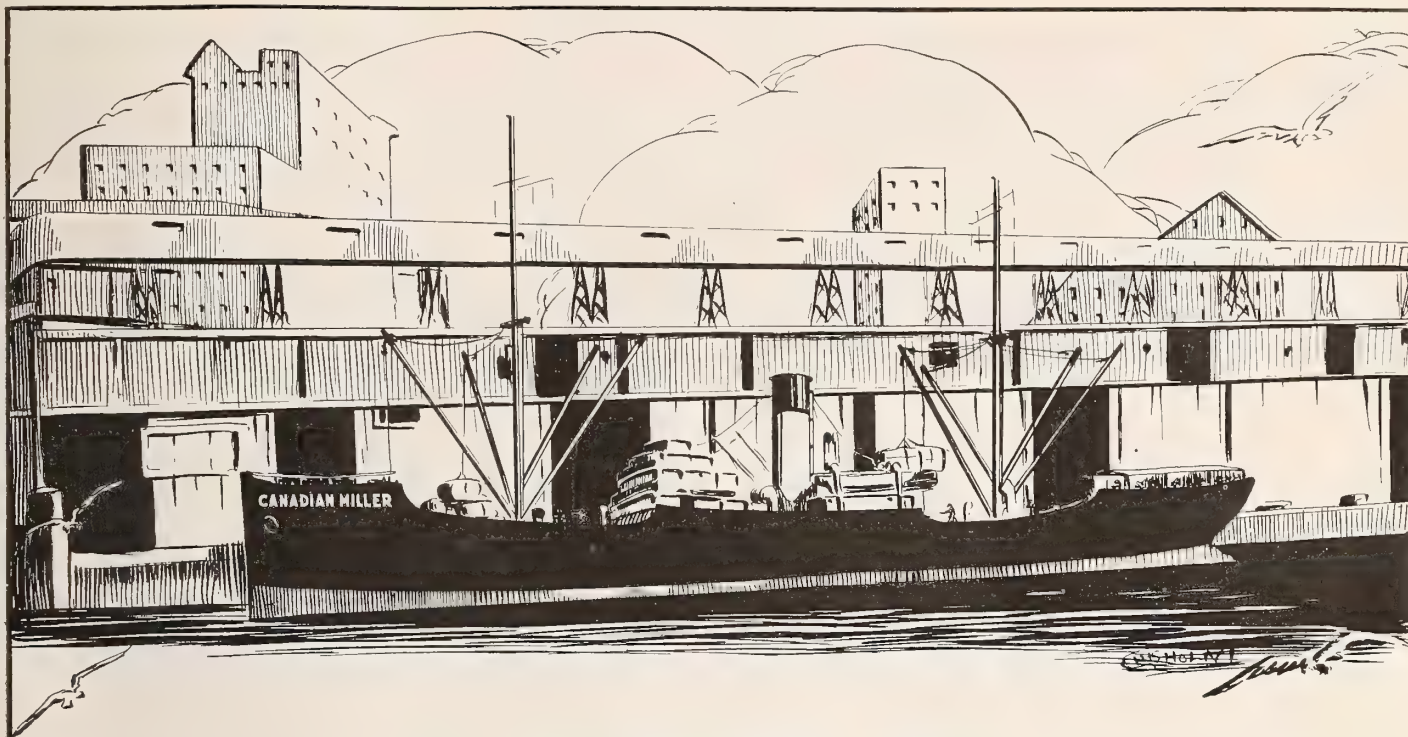
Trans-Pacific Service Appreciated

Australian Importer finds that services of Canadian Government Merchant Marine fill want.

In an interview in the *Montreal Star*, John W. Riley, an importer, of Sydney, N.S.W., who was on his way to Europe, said that the newly-established freight services of the Canadian Government Merchant Marine were filling a long-felt want.

Prior to the opening up by the Government steamers of a direct service between Vancouver and Australian and New Zealand ports there was no regular all-freight connection between Canada and Antipodes, and the new service has come as a boon to shippers on both sides of the Pacific, according to Mr. Riley. Australia, he states, offers a big market for agricultural machinery, automobiles, pulp, and all classes of manufactured goods, and in return for export hides, wool, and mutton. The transportation of these commodities, including large shipments from the United States, which has no regular freight service to the Antipodes, has now in a large measure fallen to the lot of Canadian steamers, which are benefitting accordingly.

Speaking of general conditions in Australia, Mr. Riley stated that while suffering from the effects of the general world-depression, the Commonwealth has not been so seriously affected as other countries owing to the fact that it is largely agricultural.



On Land And Over Seas

The "National" Services

Railways

Steamships

Express

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High-grade steel Passenger equipment of latest design on transcontinental trains; sleeping and dining car service that is unexcelled; from ocean to ocean and between all important points.

Freight trains to carry the products from the chief productive areas, and to market the manufactured goods. They reach, direct, all of the great ports in the Dominion.

Sixty ships, under the flag of *Canadian Government Merchant Marine, Limited*, are in service between Atlantic and Pacific coast points, in Canada and the chief ports abroad, engaged in the business of expanding Canada's foreign trade.

CANADIAN NATIONAL RAILWAYS

CANADIAN GOVERNMENT MERCHANT MARINE, LIMITED.

"The National Way"

MACDONALD MFG. CO., Limited

Toronto - Canada

Manufacturers of
**PLAIN and LITHOGRAPHED
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Bureau of Canadian Information



THE CANADIAN PACIFIC RAILWAY, through its Bureau of Canadian Information, will furnish you with the latest reliable information on every phase of industrial and agricultural development in Canada. In the Reference Libraries maintained at Chicago, New York and Montreal are complete data on natural resources, climate, labor, transportation, business openings, etc., in Canada. Additional data is constantly being added.

No charge or obligation attaches to this service. Business organizations are invited to make use of it.

CANADIAN PACIFIC RAILWAY
Department of Colonization and Development

65 E. Ontario St. Chicago 335 Windsor Station Montreal 1270 Broadway New York

Big Ship Launched

S. S. Canadian Freighter last of 21 vessels to be built by Coughlan Shipyards

With the launching at Vancouver on Oct. 12, of the steel freighter, Canadian Freighter, the Coughlan Shipyards brought to a culmination the greatest shipbuilding program of any Canadian shipyard. The launching marked the completion of twenty-one steel hulls of a total of 182,100 tons d.w. These consisted of fifteen 8800-ton and six 8350-ton ships. The Canadian Freighter is of 8350 tons and was built to the order of the Canadian Government Merchant Marine.

Charter Japanese Ships

Canadian Robert Dollar Company to Carry Lumber from Pacific Ports to Japan

Four Japanese ships of average deep sea tonnage have been chartered by the Canadian Robert Dollar Company to carry lumber cargoes from North Pacific ports to Japan, according to information reaching the Merchant's Exchange. Only one of these vessels will come to Vancouver, according to Melville Dollar, president of the company.

The ships include the Vancouver Maru, built in 1919, 5864 tons gross; the Keifuku Maru, 5857 tons gross; the Pacific Maru, recently placed in service, 4254 tons gross; and the Shintoku Maru, about 4500 tons gross, built in 1918. The charter rate has not been divulged by the company. The other three cargoes go from Puget Sound ports.

The chartering of these ships is an indication that there is renewed activity in the lumber trade. During the past few weeks there has been an increase in the amount of lumber leaving the North Pacific and charters have been announced from many other ports to the south.

Recent Trade Enquiries

A list of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C. M. A., Toronto.

FOREIGN

765. Canned Goods—An important firm, members of the London Chamber of Commerce, desire to act as British agents for canners in Canada of fruit, jams, meats, milk, vegetables, etc.
766. Calcutta—A responsible firm of merchants and manufacturers' agents are importers of hardware, tools, machinery, textiles and spirits, and invite correspondence from Canadian manufacturers of these lines.
767. Hay, Oats, Potatoes, Codfish and Flour—An established produce broker with many years' experience in Cuba, desires Canadian connections in the above noted commodities. Has a representative in Canada at present, who would be glad to visit prospective exporters. References.
768. Potatoes—A prominent Havana commission house furnishing excellent references, wishes first class connection with Canadian potato exporter. Will be pleased to consider any offer of representation.
769. Fish—A Buenos Aires firm of importers specializing in food products would like to correspond with exporters of salmon, cod and stockfish with a view to acting as their representatives in Argentina.
770. Lobster and Salmon—A commission agent in Le Havre is desirous of getting in touch with Canadian exporters of canned lobster and salmon with a view to becoming their agents for the Seine-Inferieure and Calvados departments in France. He states that he is well known to all local business men and in a good position to push this class of goods. References.
771. Crepe Paper Napkins—A London firm are open to purchase crepe paper napkins, and invite offers and samples from Canadian manufacturers.
772. Woodpulp—A very important English firm in Milan would be glad to hear from producers of chemical woodpulp and to receive c.i.f. Genoa prices, with a view to representing Canadian producers in Italy.
773. Paper Making Machinery, Supplies for Paper Industry, and Woodpulp—A Milan firm desires to hear from Canadian exporters interested in doing business with Italy in paper making machinery, supplies for the paper industry and woodpulp.

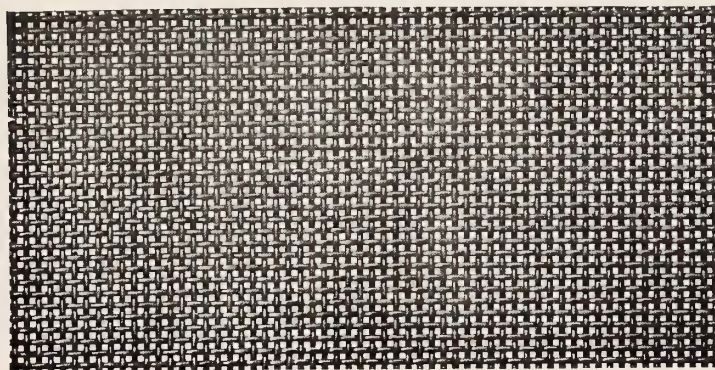
THE B. GREENING WIRE CO. LIMITED

MANUFACTURERS OF

WIRE CLOTH

WIRE ROPE

PERFORATED METALS



Hamilton, Ont.

Montreal, Que.

Buyers' Guide to Canadian Manufactures

List of Articles which will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. Rates for insertion in this department, \$4.00 per heading per year (12 insertions).

ABRASIVES

- *Canadian Hart Wheels, Limited, Hamilton, Ont.
- *Dominion Abrasive Wheel Co., New Toronto, Ont.
- *Norton Company of Canada, Ltd., Hamilton, Ont.

ACCOUNT BOOKS

- *The Brown Bros., Ltd., Toronto.

ACCUMULATORS, hydraulic

- *The Hydraulic Machinery Co., Limited, Montreal.

ACETYLENE GAS

- *The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACETYLENE GAS BURNERS

- Economic Acetylene Burner Co., Toronto, Ont.
- *The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACIDS

- *The Grasselli Chemical Co., Ltd., Toronto.
- *The Nichols Chemical Co., Ltd., Montreal, Que.

ADVERTISING NOVELTIES

- Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES

- Charles Gurd & Co., Ltd., Montreal, Que.
- J. J. McLaughlin, Ltd., Toronto.

AIR COMPRESSORS

- *Canadian Ingersoll-Rand Co., Sherbrooke, Que.
- *Smart-Turner Machine Co., Ltd., Hamilton, Ont.

AIR LIFT PUMPS

- *Canadian Ingersoll-Rand Co., Sherbrooke, Que.

ALCOHOL

- *Canadian Industrial Alcohol Company, Ltd., Montreal, Que.

ALKALIES

- Brunner, Mond Canada, Limited, Amherstburg, Ont.

ALUMINUM

- *Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto.

ALUMINUM COOKING UTENSILS

- "Ideal" Aluminum Products, Ltd., Toronto.

AMMONIA

- Canadian Ammonia Co., Ltd., Toronto, Ont.

ANCHORS, all steel

- Beauchemin & Fils, Ltd., Sorel, Que.

ANGLE BARS

- *Burlington Steel Co., Ltd., Hamilton, Ont.
- *MacKinnon Steel Co., Limited, Sherbrooke, Que.
- *The Steel Company of Canada, Ltd., Hamilton, Ont.

ARSENIC

- *Deloro Smelting & Refining Co., Limited, Deloro, Ont.

ARTIFICIAL LIMBS

- Chesley Artificial Limb Co., Ltd., Hantsport, N.S.

ASBESTOS

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEATHING

- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEET AND PISTON PACKINGS

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS STEAM PIPE AND BOILER COVERINGS

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS TEXTILES

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

AUTOMOBILE PARTS

- *Dominion Forge & Stamping Co., Walkerville, Ont.

AUTOMOBILE TIRES

- Ames-Holden-McCreedy, Limited, Montreal, Que.

AWNING CORD (cotton)

- Hamilton Cotton Co., Hamilton, Ont.

AXLES

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL

- Alonso W. Spooner, Ltd., Port Hope, Ont.
- Beveridge Supply Co., Limited, Montreal, Que.
- *Hoyt Metal Co., Toronto, Ont.
- Magnolia Metal Co. of Canada, Ltd., Montreal, Que.
- *The Canada Metal Co., Toronto, Ont.
- *Tallman Brass & Metal, Ltd., Hamilton, Ont.

BAGS, Cotton

- The Canadian Bag Co., Limited, Montreal, Que.

BAGS, jute

- The Canadian Bag Co., Limited, Montreal, Que.

BAGS, travelling

- J. Eveleigh & Co., Ltd., Montreal.
- Lamontague, Ltd., Montreal, Que.
- *The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

BAND RESAWS

- *Canada Machinery Corporation, Limited, Galt, Ont.
- *P. B. Yates Machine Co., Ltd., Hamilton, Ont.

BAND SAWS

- *E. C. Atkins & Co., Inc., Hamilton, Ont.

BANK FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK AND OFFICE RAILINGS AND CAGES

- *Canada Wire and Iron Goods Co., Hamilton, Ont.
- *Dennis Wire & Iron Works Co., London, Ont.
- *The Geo. B. Meadows, Toronto.
- Wire, Iron & Brass Works Co., Ltd., Toronto, Ont.

BARRELS, steel, and containers

- *Smart-Turner Machine Co., Ltd., Hamilton, Ont.

BARS, iron

- London Rolling Mill Co., Ltd., London, Ont.

BARS, steel

- London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS

- A. J. Reach Co., Brantford, Ont.

BATHS, enamelled

- Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry

- *The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Flashlight

- *The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Storage

- *The Canadian National Carbon Co., Ltd., Toronto, Ont.

BEARINGS, pillow block and upright

- *Canadian Fairbanks-Morse Company, Ltd., Montreal, Que.

BELT HOOKS

- *Torrington Company, Limited, Upper Bedford, Que.

BELTING CHAINS

- *Canadian Link-Belt Company, Ltd., Toronto, Ont.

BELTING, elevator

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather

- The Beardmore Belting Co., Ltd., Toronto, Ont.
- *J. L. Goodhue & Co., Danville, Que.
- *McArthur Beltings, Limited, Brockville, Ont.
- *The D. K. McLaren Belting Co., Ltd., Montreal, Que.
- *The J. C. McLaren Belting Co., Ltd., Montreal, Que.

BELTING, rubber

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
- *Gutta, Percha and Rubber Ltd., Toronto, Ont.

BELTING, stitched cotton duck

- *Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS

- The Crown Lumber Co., Woodstock, Ont.

BISCUITS

- The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS

- *A. C. Leslie & Co., Montreal, Que.

BLANKETS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.
- J. Walshaw & Son, Ltd., Bolton, Ont.

BLANKETS, horse

- Slingsby Mfg. Co., Ltd., Brantford, Ont.
- J. Walshaw & Son, Ltd., Bolton, Ont.

BLASTING ACCESSORIES

- Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER

- *Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS

- *The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

BOATS OF ALL KINDS

- Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOBBINS

- Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

BOILER COMPOUND

- Beveridge Supply Co., Limited, Montreal, Que.

BOILER COMPOUND AND OILS

- Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILER GRAPHITE

- Black Donald Graphite Company, Limited, Calabogie, Ont.

BOILER LININGS AND COVERINGS

- Beveridge Supply Co., Ltd., Montreal, Que.

BOILERS

- *Canadian Mead Morrison Co., Ltd., Montreal, Que.
- *Goldie & McCulloch Co., Limited, Galt, Ont.
- *E. Leonard & Sons, Ltd., London, Ont.
- J. & R. Weir, Montreal, Que.
- Taylor-Forbes Co., Ltd., Guelph
- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, hot water or steam

- Warden King, Ltd., Montreal.

BOILERS, steam

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, steam and brass work

- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BOLTS AND NUTS

- *The Canadian Tube & Iron Co., Ltd., Montreal, Que.
- *The National Acme Mfg. Co., Montreal, Que.
- *The Steel Company of Canada, Ltd., Hamilton, Ont.

BOOKBINDERS

- *The Brown Bros., Ltd., Toronto.

BOOKCASES

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

BOOKCASES, sectional (Gunn)

- The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKS, blank

- *The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES

- Ames-Holden-McCreedy, Limited, Montreal, Que.
- J. Leckie Co., Ltd.
- The John Ritchie Co., Ltd., Quebec, Que.

BOXES, cellular and fibre board

- *Hinde & Dauch Paper Co. of Canada, Limited, Toronto.
- *Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

BOXES, rattle and soap

- The Arlington Co. of Canada, Ltd., Toronto, Ont.

BOXES, steel shop

- *Steel Trough and Machine Co., Ltd., Tweed, Ont.

BOXES AND SHOOKS, wooden

- The C. Beck Mfg. Co., Ltd., Penatanguishene, Ont.

BOXES, wooden

- Barchard & Co., Ltd., Toronto.

BRAKE SHOES

- *Canadian Hart Wheels, Limited, Hamilton, Ont.

BRANDS, burning

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS AND BRONZE WIRE

- *Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

BRASS ENGRAVERS

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS

- *The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- Sully Brass Foundry, Limited, Toronto
- *Tallman Brass & Metal, Ltd., Hamilton, Ont.

BRASS GOODS

- *The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
- *The Kerr Engine Co., Limited, Walkerville, Ont.

BRASS RODS, SHEETS AND PLATES

- *Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

BRASS SHEETS AND PLATES

- *Copper Products, Ltd., Montreal, Que.

BRASS TUBING, seamless

- Canadian Seamless Wire Co., Ltd., Toronto, Ont.
- *Copper Products, Ltd., Montreal, Que.

BRASS WIRE

- Canadian Seamless Wire Co., Ltd., Toronto.

BRASS WORK, church

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special

- *Booth-Coulter Copper & Brass Co., Ltd., Toronto.
- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BRICK

- National Brick Co. of Laprairie, Laprairie, Que.
- Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel

- National Brick Co. of Laprairie, Laprairie, Que.

BRICK, pressed

- National Brick Co. of Laprairie, Laprairie, Que.

BRICK, rubbing

- *Canadian Hart Wheels, Limited, Hamilton, Ont.

BRICK, sewer.

- National Brick Co. of Laprairie, Laprairie, Que.

BRIDGES, Railway and Highway

- *Canadian Des Moines Steel Co., Limited, Chatham.
- *Hamilton Bridge Works Co., Ltd., Walkerville, Ont.
- *The Canadian Bridge Co., Ltd., Hamilton, Ont.
- *McGregor & McIntyre, Ltd., Toronto, Ont.
- *Dominion Bridge Co., Montreal.
- *Mackinnon Steel Co., Ltd., Sherbrooke, Que.

BROOMS

- Simms, T. S., & Co., Limited, St. John, N.B.
- Stevens-Hepner Co., Limited, Port Elgin, Ont.

BRONZE SHEETS, RODS, PLATES

- *Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.
- *Copper Products, Ltd., Montreal.

BRONZE TUBING, seamless

- *Copper Products, Ltd., Montreal, Que.

BRUSHES

- Simms, T. S., & Co., Limited, St. John, N.B.
- Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon

- *Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS

- *Mackinnon Steel Co., Ltd., Sherbrooke, Que.
- *The Bennett & Wright Co., Ltd., Toronto, Ont.

BUILDING FELT AND PAPER

- Beveridge Supply Co., Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
- *The Barrett Co., Ltd., Toronto and Montreal.

BUNGS, wooden for barrels

- Wm. H. White, Ville St. Pierre, Montreal, Que.

BUCKLES, shoe and coat

- Parmenter & Bulloch Co., Limited, Gananoque, Ont.

BURLAPS

- The Canadian Bag Co., Limited, Montreal, Que.

BURLAPS, decorative

- Dominion Oil Cloth and Linoleum Co., Limited, Montreal, Que.

CABLES, electric light, power, telephone and telegraph

- *Northern Electric Company, Limited, Montreal, Que.
- *Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

CABLES, wire

- *The Dominion Wire Rope Co., Ltd., Montreal, Que.
- *The B. Greening Wire Co., Ltd., Hamilton, Ont.

CALENDARS, ADVERTISING

- NOVELTIES, etc.
- Lawson & Jones, Ltd., London.

CAMERAS

- Canadian Kodak Co., Ltd., Toronto, Ont.

CAMPERS' OUTFITTERS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANADA SILVER

- *Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

CANOE

- Peterboro Canoe Co., Ltd., Peterboro, Ont.
- The "Canadian" Canoe Co., Ltd., 216 Rink St., Peterborough, Ont.

CANS, baking powder, etc.

- American Can Co., Montreal (Que.) and Hamilton (Ont.).
- A. R. Whittall Can. Co., Ltd., Montreal, Que.
- *MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, fruit

- American Can Co., Montreal (Que.) and Hamilton (Ont.).
- A. R. Whittall Can. Co., Ltd., Montreal, Que.
- *MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, iron, lead and putty

- A. R. Whittall Can. Co., Ltd., Montreal, Que.

CANS, tin

- A. R. Whittall Can. Co., Ltd., Montreal, Que.
- American Can Co., Montreal (Que.) and Hamilton (Ont.).
- *MacDonald Mfg. Co., Ltd., Toronto, Ont.

CAPS, cloth

- John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE

- *Canada Carbide Co., Ltd., Montreal, Que.

CARBONS-PROJECTOR

- *Canadian National Carbon Co., Toronto, Ont.

CARBONIC ACID GAS

- *Canadian Carbonate Co., Montreal.

CARD RECORD SYSTEMS

- Lowe-Martin Co., Ltd., Ottawa, Ont.
- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

CARPETS AND RUGS

- Toronto Carpet Mfg. Co., Limited, Toronto.

CARRIERS

- *Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARRIERS, box and barrel

- *Canadian Mathews Gravity Carrier.

CARRIERS, brick

- *Canadian Mathews Gravity Carrier Co., Limited, Toronto.
- *Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS

- *National Steel Car Co., Ltd., Hamilton, Ont.

CARS, industrial

- *Mackinnon Steel Co., Ltd., Sherbrooke, Que.

CARTONS, lithographed

- Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
- Harris Lithographing Co., Ltd., Toronto, Ont.

CASTINGS, Alloy

- *The Electric Steel & Metals Co., Ltd., Welland, Ont.

CASTINGS, aluminum, brass and bronze

- *Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- Sully Brass Foundry, Limited, Toronto.

CASTINGS, grey iron

- *Canadian Rumely Co., Ltd., Toronto, Ont.

CASTINGS, malleable iron

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

CASTINGS, steel

- *Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CASTINGS, malleable iron

- *Galt Malleable Iron Co., Ltd., Galt, Ont.

CASTINGS, steel

- Beauchemin & Fils, Ltd., Sorel, Que.
- *Canadian Steel Foundries, Ltd., Montreal, Que.
- *Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
- *Electric Steel & Metals Co., Ltd., Welland, Ont.
- *Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS

- Grip, Ltd., Toronto, Ont.

CATALOGUE COVERS, by new lithographing process

- Harris Lithographing Co., Ltd., Toronto, Ont.

CAUSTIC SODA

- *Canadian Salt Co., Ltd., Windsor.

CEMENT WATERPROOFING

- *Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

CEMENTS, High Temp.; plastic, liquid

- Beveridge Supply Co., Limited, Montreal, Que.

CENTRIFUGAL PUMPS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

CHAINS, for elevators, conveyors and drives

- *Canadian Link-Belt Company, Ltd., Toronto, Ont.
- Dodge Manufacturing Co. of Canada, Ltd., Toronto.

CHAIRS

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

CHAIRS; Folding and Assembly Seating

- Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered

- Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS

- Canadian Laboratory Supplies, Ltd., Toronto, Ont.
- *The Grasselli Chemical Co., Ltd., Toronto, Ont.
- *The Nichols Chemical Co., Ltd., Montreal, Que.

CHEMISTS, industrial

- *Milton Hersey Co., Montreal.

CHICLETS AND CHEWING GUM

- Canadian Chewing Gum Co., Ltd., Toronto, Ont.

CIRCULAR CUTTERS, solid steel

- *Galt Knife Co., Ltd.
- The Peter Hay Knife Co., Ltd., Galt, Ont.

CIRCULAR SAWS

- *E. C. Atkins & Co., Inc., Hamilton, Ont.

CLAM SHELL BUCKETS

- *Canadian Mead Morrison Co., Ltd., Montreal, Que.

CLOCKS, time

- *International Business Machines Co., Ltd., Toronto, Ont.

CLOCKS, watchmen's

- *The Bennett & Wright Co., Ltd., Toronto, Ont.

CLOSET SEATS

- *Goderich Organ Co., Goderich, Ont.

CLOTHING

- John W. Peck & Co., Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats

- *A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw

- The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton

- Hamilton Cotton Co., Hamilton, Ont.

COAL

- *Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
- Standard Fuel Co., Toronto, Ont.

COBALT OXIDE

- *Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

- The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COBALT METAL

- *Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

COFFEE

- S. H. Ewing & Sons, Montreal.

COLD DRAWN SHAPES, flats, squares and hexagons

- *The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
- *Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS

- *John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS

- The Arlington Co. of Canada, Ltd., Toronto, Ont.

COLLARS, Composition

- Parsons & Parsons Canadian Co., Hamilton, Ont.

COLORS

- *A. Ramsay & Son Co., Montreal.

COMBS, fine dressing and name

- The Arlington Co. of Canada, Ltd., Toronto

COMMERCIAL STATIONERY

- *Brown Bros., Ltd., Toronto, Ont.

CONCRETE COATINGS, PAINTS, Etc.

- *The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

CONCRETE HARDENER AND WATERPROOFER

- Beveridge Supply Co., Limited, Montreal, Que.
- Sturgeons Limited, Toronto.

CONDENSERS, Barometric

- *Canadian Ingersoll-Rand Co., Sherbrooke, Que.

CONDENSERS, jet and surface

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

CONDENSERS, rotary jet

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

CONDUIT FOR INTERIOR WIRING

- *Conduits Co., Ltd., Toronto, Ont.
- *National Conduit Co., Limited, Toronto.

CONFECTIONERY

Ganong Bros., Ltd., St. Stephens, N.B.

Moirs, Ltd., Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

CONTAINER BOARD—strong container

*Bathurst Lumber Co., Ltd., Bathurst, N.B.

CONTRACTOR'S PLANT

*Canadian Mead Morrison Co., Ltd., Montreal, Que.

CONVEYORS

*Canadian Link-Belt Company, Ltd., Toronto, Ont.

*Canadian Mathews Gravity Carrier Co., Toronto.

Dodge Manufacturing Co. of Canada, Ltd., Toronto.

COPPER

*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.

COPPER, SHEETS, PLATES, BARS, RODS

*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto, Ont.

*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

*Copper Products, Ltd., Montreal, Que.

COPPERSMITHS

*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

COPPER TUBING, seamless

*Copper Products, Ltd., Montreal, Que.

Canadian Seamless Wire Co., Ltd., Toronto, Ont.

*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

COPPER WIRE

Canadian Seamless Wire Co., Ltd., Toronto, Ont.

*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

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Harold C. Shipman & Co., Ottawa, Ont.

CORKS

S. H. Ewing & Sons, Montreal, Que.

CORK CARPET

Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.

CORRUGATED PAPER BOXES

Corrugated Paper Box Co., Ltd., Toronto, Ont.

*Hinde & Dauch Paper Co. of Canada, Limited, Toronto.

Standard Paper Box Company, Ltd., Montreal, Que.

*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

CORSETS

Dominion Corset Co., Quebec, Que.

COTTONS

*Montreal Cottons, Ltd., Valleyfield, P.Q.

COTTONADES

Hamilton Cotton Co., Hamilton, Ont.

COUPLERS

*Canadian Steel Foundries, Ltd., Welland, Ont.

CRANES

*Northern Crane Works, Walkerville, Ont.

*The Herbert Morris Crane and Hoist Co., Ltd., Niagara Falls, Ont.

CREAM CHEESE, Ingersoll

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS

De Laval Dairy Supply Co., Peterboro, Ont.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES

De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

CROOKED MATERIALS

The Barrett Co., Ltd., Toronto and Montreal.

CRUSHERS, Rock and Ore

*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

CUPOLAS

*Northern Crane Works, Ltd., Walkerville, Ont.

CUPS, presentation

Standard Silver Co., Toronto, Ont.

CURTAINS, chenille

Hamilton Cotton Co., Hamilton, Ont.

CUTLERY

Standard Silver Co., Toronto, Ont.

CUTTERS, machine

*Pratt & Whitney Co., Dundas, Ont.

DECALCOMANIA TRANSFERS

Canada Decalcomania Co., Toronto, Ont.

DENIMS

Hamilton Cotton Co., Hamilton, Ont.

DERAILS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS AND PRINTERS OF BOOKLETS, Etc.

Grip, Ltd., Toronto, Ont.

DESIGNERS OF LABOR SAVING DEVICES

Harold C. Shipman & Co., Ottawa, Ont.

DESKS

*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

The Macey Office Equipment Co., Toronto.

DIE CASTINGS

*Tallman Brass & Metal, Limited, Hamilton, Ont.

DIES

*Butterfield & Co., Rock Island, P.Q.

*Pratt & Whitney Co., Dundas, Ont.

DIES, for metal stampings.

Larsen & Shaw, Ltd., Walkerton.

DINING ROOM SUITES

The George McLagan Furniture Co., Ltd., Stratford, Ont.

DISINFECTING APPARATUS

Spramotor Co., London, Ont.

DOOR HANGERS

*Richards Wilcox Canadian Co., Ltd., London, Ont.

DREDGES

*Canadian Mead Morrison Co., Ltd., Montreal, Que.

DRILL PRESSES

*Canada Machinery Corporation, Ltd., Galt, Ont.

DRILL SHARPENERS

*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

DRILLS

*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

*Pratt & Whitney Co., Dundas, Ont.

DRIFT BOLTS OR SPIKES

London Rolling Mill Co., Ltd., London, Ont.

DROP HAMMERS

*Canada Machinery Corporation, Ltd., Galt, Ont.

DRUMS, steel, and containers

*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

DRY COLORS

*The Imperial Varnish & Color Co., Ltd., Toronto.

DUMB WAITERS

Turnbull Elevator Mfg. Co., Toronto, Ont.

DURABLE WIRE ROPE

*The Dominion Wire Rope Co., Ltd., Montreal, Que.

DYNAMITE

Canadian Explosives, Ltd., Montreal, Que.

DYNAMOS

*Jones & Moore Electric Co., Ltd., Toronto, Ont.

*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

DYNAMOS, plating

*Jones & Moore Electric Co., Ltd., Toronto, Ont.

EIDERDOWN

Galt Knitting Co., Ltd., Galt, Ont.

ELECTRICAL AND GAS FIXTURES

The Garth Co., Montreal, Que.

The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.

*Tallman Brass & Metal, Ltd., Hamilton, Ont.

ELECTRIC APPLIANCES

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

ELECTRICAL COMPOUNDS

Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRIC PLATE WARE

Roden Bros., Ltd., Toronto, Ont.

ELECTRODES, carbon

*Canadian National Carbon Co., Ltd., Toronto, Ont.

ELECTROTYPING

Central Press Agency, Ltd., Toronto.

ELECTRICAL SUPPLIES

*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

*Jones & Moore Electric Co., Ltd., Toronto, Ont.

*Northern Electric Co., Ltd., Montreal, Que.

ELECTRO-SILVER PLATED WARE

Standard Silver Co., Toronto, Ont.

ELEVATING MACHINERY

*Canadian Link-Belt Company, Ltd., Toronto, Ont.

*Canadian Mathews Gravity Carrier Co., Toronto, Ont.

Dodge Manufacturing Co. of Canada, Ltd., Toronto.

ELEVATORS

*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

Turnbull Elevator Mfg. Co., Toronto, Ont.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

*Northern Crane Works, Ltd., Walkerville, Ont.

ELEVATORS FOR ALL PURPOSES

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

ELEVATOR GATES AND DOORS

Turnbull Elevator Mfg. Co., Ltd., Toronto, Ont.

*The A. B. Ormsby Co., Ltd., Toronto, Ont.

ELEVATOR GUARDS

*The Geo. B. Meadows, Toronto.

Iron & Brass Goods Works Co., Ltd., Toronto, Ont.

*Canada Wire and Iron Goods Co., Hamilton, Ont.

EMERY GRINDERS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS

Dominion Paint Works, Limited, Walkerville, Ont.

*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

ENAMEL AND TIN WARE

*McClary Mfg. Co., London, Ont.

ENGINES

*E. Leonard & Sons, Limited, London, Ont.

*Goldie & McCulloch Co., Ltd., Galt, Ont.

J. & R. Weir, Montreal, Que.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

ENGINES, gas and gasoline

*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

*Hamilton Motor Works, Ltd., Hamilton, Ont.

*Massey-Harris Co., Ltd., Toronto.

ENGINES, gasoline, tractor, plowing and threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting

*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

*Canadian Mead Morrison Co., Ltd., Montreal, Que.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

ENGINES, marine, gasoline and kerosene

Bruce, Stewart & Co., Ltd., Charlottetown, P.E.I.

ENGINES, steam plowing and threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS, photo

Grip, Ltd., Toronto, Ont.

ENGRAVERS, half-tone

Grip, Ltd., Toronto.

ENGRAVERS AND PRINTERS

steel plate

American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS

bank note

American Bank Note Co., Ottawa, Ont.

ENGRAVING

*J. L. Jones Engraving Co., Toronto, Ont.

ENGRAVING, copper and steel

plate

Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

ENSILAGE AND STRAW CUTTERS

J. Fleury's Sons, Aurora, Ont.

*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

ENVELOPES

*Barber-Ellis Co., Ltd., Toronto.

Canada Envelope Co., Montreal, Que.

EXPANSION BOLTS

Beveridge Supply Co., Limited, Montreal, Que.

EXPERTS IN PATENT CAUSES

*Ridout & Maybee, Toronto, Ont.

EXPLOSIVES, high

Canadian Explosives, Ltd., Montreal, Que.

FACE PLATE JAWS

*Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery

De Laval Dairy Supply Co., Ltd., Montreal, Que.

FANS

*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

FENCING, wire

*C. H. Johnson & Sons, Ltd., Montreal, Que.

FELTS, pulp and paper makers

Ayers, Ltd., Lachute Mills, P.Q.

FENCES AND GATES

*Dennis Wire & Iron Works Co., London, Ont.

*Canada Wire & Iron Goods Co., Hamilton, Ont.

*Frost Steel & Wire Company, Limited, Hamilton, Ontario.

FIBRE PAIS

*The E. B. Eddy Co., Ltd., Hull, Que.

FIBRE (vulcanized), sheets, rods, tubes, etc.

*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

FIBREBRICK, Plastic, jointless

Beveridge Supply Co., Limited, Montreal, Que.

FILES

Henry Disston & Sons, Ltd., Toronto, Ont.

*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

*The Nicholson File Co., Port Hope.

The Ingersoll File Company, Ltd., Ingersoll, Ont.

FILING CABINETS

*Office Specialty Co., Newmarket, Ont.

FILING DEVICES

The Macey Office Equipment Co., Toronto.

FILING EQUIPMENT, wood & steel

*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

FILING SYSTEMS

*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

Lowe-Martin Co., Ltd., Ottawa, Ont.

FIRE ALARMS

*Northern Electric Co., Ltd., Montreal, Que.

- FIRE BRICK**
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
- FIRE BRICK AND CLAY**
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
- FIRE BRICK, PLASTIC**
Beveridge Supply Co., Limited, Montreal, Que.
- FIRE DOOR HARDWARE**
*Richard Wilcox Canadian Co., Ltd., London, Ont.
- FIRE DOORS**
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.
- FIRE ENGINES**
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
- FIRE ESCAPES**
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
- FIRE EXTINGUISHERS**
*A. B. Ormsby Co., Ltd., Toronto.
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Montreal, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
- FIRE FIGHTING APPARATUS**
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
- FIRE HOSE**
*Canadian Consolidated Rubber Co. of Canada, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
- FIRE PREVENTION MATERIAL**
*Chicago Bridge & Iron Works Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
- FIRE-PROOF WINDOWS AND DOORS**
*Canadian Metal Window & Steel Products, Limited, Toronto.
*A. B. Ormsby Co., Ltd., Toronto.
*Pedlar People, Ltd., Oshawa, Ont.
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
- FIRE PROTECTION SYSTEMS**
*Canadian Des Moines Steel Co., Limited, Chatham.
- FIRE SPRINKLER SYSTEMS**
*Chicago Bridge & Iron Works Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy Mansell Co., Toronto, Ont.
- FIRE AND WATER DEPARTMENT**
*Chicago Bridge & Iron Works Bridgeburg, Ont.
The Garth Co., Montreal, Que.
- FISH, Atlantic Sea-Foods**
Maritime Fish Corporation, Ltd., Montreal, Que.
- FITTINGS FOR SOIL PIPE**
Anthes Foundry, Ltd., Toronto.
- FITTINGS, steam**
Warden King Ltd., Montreal, Que.
- FLOORING, hardwood**
Seaman Kent Co., Ltd., Meaford, Ont.
- FOLDING PAPER BOXES**
Standard Paper Box Company, Ltd., Montreal, Que.
- FORGES**
*Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
- FORGINGS**
*Canada Foundries & Forgings Co., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- FORGINGS, drop**
*Dominion Forge & Stamping Co., Walkerville, Ont.
- FOUNDRY EQUIPMENT**
*Northern Crane Works, Ltd., Walkerville, Ont.
- FOUNTAIN FRUITS AND JUICES**
J. J. McLaughlin, Ltd., Toronto.
- FROGS AND CROSSINGS, manganese**
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
- FUEL**
Standard Fuel Co., Toronto, Ont.
- FUR GARMENTS, men's and women's**
Holt, Renfrew, Ltd., Quebec.
- FUR GOODS**
John W. Peck & Co., Ltd., Montreal, Que.
- FURNACES**
*McClary Mfg. Co., London, Ont.
- FURNITURE; Camp and Verandah and Novelties**
The Stratford Mfg. Co., Limited, Stratford, Ont.
- FURNITURE, hall**
The George McLagan Furniture Co., Ltd., Stratford, Ont.
- FURNITURE, office**
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
- FURNITURE, reed and rattan**
Imperial Rattan Co., Ltd., Stratford, Ont.
- FUSES**
*Economy Fuse & Mfg. Co., Montreal, Que.
- GALVANIZED IRON**
*A. C. Leslie & Co., Montreal.
- GALVANIZED SHEETS**
*Dominion Sheet Metal Co., Hamilton, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
- GALVANIZERS**
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa.
- GALVANIZING, custom**
The Gould, Shapley & Muir Co., Ltd., Brantford, Ont.
- GASOLINE ENGINES**
*Ontario Wind & Pump Co., Ltd., Toronto, Ont.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
*The Gould Shapley & Muir Co., Limited, Brantford, Ont.
- GASOLINE FIRE ENGINES**
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Waterous Engine Works Co., Ltd., Brantford, Ont.
- GASOLINE STORAGE SYSTEMS, special underground**
*S. F. Bowser & Co., Toronto.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
- GASOLINE**
*The Imperial Oil Co., Ltd., Toronto, Ont.
- GEARS, cut**
*Hamilton Gear and Machine, Toronto.
- GEARS (noiseless, waterproof)**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- GELATINE**
Canada Gelatine Co., Ltd., Brantford, Ont.
- GENERATORS**
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
- GILDING METAL**
*Copper Products, Ltd., Montreal, Que.
- GLASSWARE**
Dominion Glass Co., Ltd., Montreal, Que.
- GLASSWARE, cut**
Roden Bros., Ltd., Toronto.
- GLASS FOR BUILDINGS**
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
- GLASS BENDERS**
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
- GLASS, mirror**
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
- GLOVES AND MITTS**
*A. R. Clarke & Co., Ltd., Toronto.
Craig, Cowan Co., Ltd., Toronto.
- GLUE**
Canada Glue Co., Ltd., Brantford, Ont.
- GOLD-FILLED WIRE AND PLATE**
Canadian Seamless Wire Co., Toronto, Ont.
- GOLD AND SILVER REFINERS**
Canadian Seamless Wire Co., Toronto, Ont.
- GRAIN CRUSHERS, rapid, easy**
J. Fleury's Sons, Aurora, Ont.
- GRAPE JUICE**
J. J. McLaughlin, Ltd., Toronto.
The Welch Co., Ltd., St. Catharines, Ont.
- GRAPHITE, lubricating**
Black Donald Graphite Company, Limited, Calabogie, Ont.
- GRATES**
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
- GRAVITY CARRIERS**
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
- GRILLES, metal**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
- GRINDING MACHINERY**
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
- GRINDING AND POLISHING MACHINERY**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- GRINDING WHEELS**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto, Ont.
- GRINDSTONES**
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
- GUNN SECTIONAL BOOKCASES**
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
- GUY ANCHORS**
B. J. Coghlin Co., Ltd., Montreal.
- GYPSON PRODUCTS**
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
- HACK SAW BLADES AND FRAMES**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- HACK SAW MACHINES**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- HALL FURNITURE**
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
- HANDLES (axe, pick, sledge hammers, etc.)**
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
- HANDLES, wood**
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
- HAND SAWS**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- HANGERS**
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
- HARDWARE**
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
- HARNESS**
Lamontagne, Ltd., Montreal, Que.
- HATS, ladies' felt and straw**
Toronto Hat Mfg. Co., Toronto.
- HAULAGE, wire rope**
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
- HEADING SAWS**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- HEATERS**
*Waterous Engine Works Co., Ltd., Brantford, Ont.
- HEATERS, feed water**
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
- HEATERS, WATER FEED**
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.
- HEATING APPLIANCES**
*C. A. Dunham Co., Ltd., Toronto.
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
- HEATING SYSTEMS**
*C. A. Dunham Co., Ltd., Toronto.
- HEMLOCK, union and oak sole**
Breithaupt Leather Co., Ltd., Kitchener, Ont.
- HESSIANS**
The Canadian Bag Co., Ltd., Montreal, Que.
- HINGES**
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- HOISTS, electric and pneumatic**
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
- HOSE, fire and rubber**
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
- HOUSES, factory made**
Wm. H. White, Ville St. Pierre, Montreal, Que.
- HYDRAULIC TURBINES**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- ICE CREEPERS**
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
- ICE MACHINE EQUIPMENT**
Canadian Ice Machine Co., Limited, Toronto, Ont.
- ICE-MAKING MACHINERY**
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
- INGOT METALS**
*Brown's Copper & Brass Rolling Mills, Ltd., New Toronto, Ont.
- INSERTED TOOTH SAWS**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- INSULATING COMPOUNDS**
*The Imperial Varnish & Color Co., Ltd., Toronto.
- INSULATION VULCANIZED FIBRE**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- INTERLOCKING RUBBER TILING**
*Gutta Percha & Rubber Mfg. Co. of Toronto, Ltd., Toronto, Ont.
- IRON**
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
- IRON AND STEEL BARS**
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- IRON STAIRWAYS**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
- IRONWORK, architectural**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
- IRONWORK, ornamental**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
- INDUSTRIAL DESIGN PATENTS**
Harold C. Shipman & Co., Ottawa, Ont.
- JAM, canned goods, etc.**
E. D. Smith & Son, Ltd.
- JAPANS, enamels, etc.**
A. Muirhead Co., Ltd., Toronto.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

JELLY POWDER

S. H. Ewing & Sons, Montreal
JEWELLERY, enamelled souvenir
 *Caron Bros., Montreal, Que.
JEWELLERY, gold-filled
 *Caron Bros., Montreal, Que.

JOINTERS

*Canada Machinery Corporation, Ltd., Galt, Ont.
 *P. B. Yates Machine Co., Ltd., Hamilton, Ont.

JOIST HANGERS

*Richards-Wilcox Canadian Co. Ltd., London, Ont.

JUNCTION BOXES, cable

*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

KINDLING

Standard Fuel Co., Toronto, Ont.

KNIFE GRINDERS

*Canada Machinery Corporation, Ltd., Galt, Ont.

KNITTED GOODS

*Pennman's, Ltd., Paris, Ont.

KNIVES

*Galt Knife Co., Ltd.,
 The Peter Hay Knife Co., Ltd., Galt, Ont.
 Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper

Henry Disston & Sons, Toronto.
 The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES

Canadian Kodak Co., Ltd., Toronto.

LABELS

Lawson & Jones, Ltd., London Ont.

LABELS, lithographed

Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
 Harris Lithographing Co., Ltd., Toronto, Ont.

LABORATORY SUPPLIES

Canadian Laboratory Supplies Ltd., Toronto.

LACE LEATHER

F. C. McCordick, St. Catharines Ont.
 *The D. K. McLaren Belting Co. Ltd., Montreal, Que.
 *The J. C. McLaren Belting Co. Ltd., Montreal, Que.

LADDERS

Stratford Mfg. Co., Ltd., Stratford, Ont.

LADLES, foundry

*Northern Crane Works, Ltd., Walkerville, Ont.

LAMPS, Gasoline, Vapor.

Coleman Lamp Company, Ltd., Toronto.

LATH

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS

*Ker & Goodwin, Brantford, Ont.

LATHES

*Canada Machinery Corporation, Ltd., Galt, Ont.

LAUNCHES

Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS

Taylor-Forbes Co., Ltd., Guelph Ont.

LAWN SWINGS

Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled

Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS

Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD

*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal

LEAD GRINDERS

Benjamin Moore & Co., Ltd., Toronto, Ont.

LEAD PIPE

*Hott Metal Co., Toronto, Ont.

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

*The Canada Metal Co., Toronto.

LEAD SHEET

Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

LEATHER

The Robson Leather Co., Ltd., Oshawa, Ont.

LEATHER, bookbinders'

Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy

Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS

Lamontagne, Ltd., Montreal, Que.

LEATHER GOODS, Fine

Federated Leather Goods Co., Ltd., Montreal, Que.

Canadian Leather Products, Ltd., Toronto, Ont.

LEATHER, hemlock, union and oak sole

The Breithaupt Leather Co., Ltd., Kitchener, Ont.

LEATHER, patent colt and side leather

*A. R. Clarke & Co., Ltd., Toronto

LEATHER, sheep skin, etc.

Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstery

Clarke & Clarke, Ltd., Toronto.

LEATHER, upper

A. Davis & Son., Ltd., Kingston, Ont.

King Brothers Co., Ltd., Whitby, Ont.

LINK-BELT, Ewart and saw mill riveted

*Canadian Link-Belt Co., Toronto

LINOLEUM

Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.

LITHOGRAPHERS

American Bank Note Co., Ottawa, Ont.

Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.

Harris Lithographing Co., Ltd., Toronto, Ont.

The Federated Press, Limited, Montreal, Que.

LOCKERS

*Canada Wire & Iron Goods Co., Hamilton, Ont.

*Dennis Wire & Iron Works Co., London, Ont.

*Geo. B. Meadows, Wire, Iron and Brass Works Co., Toronto, Ont.

LOCOMOTIVES, industrial

*Montreal Locomotive Works, Ltd., Montreal, Que.

LOCOMOTIVE & MARINE BRASS WORKS

The James Morrison Brass Mfg Co., Ltd., Toronto.

LOOSE LEAF SYSTEMS

Copeland-Chatterton Co., Ltd., Brampton, Ont.

LOWE-MARTIN CO., Ottawa, Ont.

LUGS, for silos and water tanks

*Ontario Wind Engine & Pump Co., Ltd., Toronto.

LUMBER

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LUMBER, asbestos

*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

LUMBER, spruce and pine, cedar railway ties and shingles

*Bathurst Lumber Co., Ltd., Bathurst, N.B.

LUMBER, red pine and spruce

Gillies Bros., Ltd., Braeside, Ont.

LUMBER, White pine

Gillies Bros., Ltd., Braeside, Ont.

LUMBERING BLANKETS

Slingsby Mfg. Co., Ltd., Brantford Ont.

MACHINE DESIGNING

Harold C. Shipman & Co., Ottawa, Ont.

MACHINE KNIVES

*Galt Knife Co., Ltd.

*E. C. Atkins & Co., Inc., Hamilton, Ont.

Henry Disston & Sons, Toronto.

MACHINE TOOLS

*Canada Machinery Corporation, Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINE WORK, special and repairs

*Canadian Rumely Co., Ltd., Toronto, Ont.

MACHINERY, special, designing and developing.

Larsen & Shaw, Ltd., Walkerton.

BAKERS

Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY AND UTENSILS FOR CANDY

Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY AND UTENSILS FOR ICE CREAM

Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY, Conveying

*Canadian Link-Belt Company, Ltd., Toronto, Ont.

*Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

MACHINERY, flour mill

*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

MACHINERY, ice cream

J. J. McLaughlin, Ltd., Toronto.

MACHINERY, grinding

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

*Canadian Mead Morrison Co., Ltd., Montreal, Que.

J. & R. Weir, Montreal, Que.

*Northern Crane Works, Ltd., Walkerville, Ont.

MACHINERY, iron working

*Canada Machinery Corporation, Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill

*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

*Dominion Engineering Works, Limited, Montreal, Que.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

MACHINERY, punching and shearing

*Canada Machinery Corporation, Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car-shop

*Canada Machinery Corporation, Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking

Sawyer-Massey Co., Ltd., Hamilton, Ont.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

MACHINERY, sawmill

The E. Long Mfg. Co., Ltd., Orillia, Ont.

P. Payette & Co., Pentanguishene, Ont.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.

MACHINERY, sheet metal working

*Canada Machinery Corporation, Ltd., Galt, Ont.

MACHINERY, woodworking

*Canada Machinery Corporation, Ltd., Galt, Ont.

*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.

Preston Woodworking Machinery Co., Ltd., Preston, Ont.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

MACHINES, painting

Spramotor Co., London, Ont.

MAGNESITE

*Canadian Carbonate Co., Montreal, Que.

MALLEABLE IRON CASTINGS

Malleable Castings Co., Ltd., Smith's Falls, Ont.

*Galt Malleable Iron Co., Ltd., Galt, Ont.

MARTINGALE RINGS AND SLIDE LOOPS

The Arlington Co. of Canada, Ltd., Toronto, Ont.

MATCHERS

*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

MATCHES

*The E. B. Eddy Co., Ltd., Hull, Que.

MECHANICAL STOKERS

*Under-feed Stoker Co. of Canada, Ltd., Toronto.

METAL, babbitt

Alonzo W. Spooner, Ltd., Port Hope, Ont.

*Canada Metal Co., Toronto, Ont.

METAL CEILINGS

*The Pedlar People, Ltd., Oshawa, Ont.

*The A. B. Ormsby Co., Ltd., Toronto, Ont.

METAL LATH

*The Pedlar People, Ltd., Oshawa, Ont.

METAL LATH

*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

METAL PACKING

*Garlock Packing Co., Hamilton, Ont.

METAL, spinning and stamping

*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

METAL PROTECTIVE PAINTS

Sturgeons Limited, Toronto.

METAL SAWS

*E. C. Atkins & Co., Inc., Hamilton, Ont.

METAL SHINGLES

*The Pedlar People, Ltd., Oshawa, Ont.

*The A. B. Ormsby Co., Ltd., Toronto, Ont.

MILK DEALERS' MACHINERY AND SUPPLIES

De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

MILLBOARD, asbestos

*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS

*Pratt & Whitney Co. of Canada, Dundas, Ont.

MILLING MACHINES

*Ford Smith Machine Co., Ltd., Hamilton, Ont.

MILL RIVETS

*Canadian Link-Belt Company, Ltd., Toronto, Ont.

MITTS AND GLOVES, Indian, tan, red deerskins

Holt, Renfrew, Ltd., Quebec, Que.

*A. R. Clarke & Co., Ltd., Toronto.

MIXERS, chocolate, dough and paint

Fletcher Mfg. Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS, Indian tanned leathers

Holt, Renfrew, Ltd., Quebec, Que.

MONEL METAL

*International Nickel Co. of Canada, Ltd., Toronto.

MORTISERS

*Canada Machinery Corporation, Ltd., Galt, Ont.

*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

MOTION PICTURES

Pathescope of Canada, Limited, Toronto.

Filmcraft Industries, Limited, Toronto, Ont.

MOTOR CARS

*Ford Co. of Canada, Ford, Ont.

MOTORS, electric (alternating current)

*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

*Jones & Moore Electric Co., Ltd., Toronto, Ont.

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

*T. & H. Electric Co., Hamilton, Ont.

MOTORS, electric (direct current)

*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

*Jones & Moore Electric Co., Ltd., Toronto, Ont.

*T. & H. Electric Co., Hamilton.

MOTORS, electric (repairing)

*T. & H. Electric Co., Hamilton.

MOTOR TRUCKS

Mapleleaf Manufacturing Company, Ltd., Montreal, Que.

MOULDERS

*Canada Machinery Corporation, Ltd., Galt, Ont.

*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

NAILS

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

NAILS, copper

Parmenter & Bullock Co., Ltd., Gananoque, Ont.

NAILS, wire

Parmenter & Bullock Co., Ltd., Gananoque, Ont.

NAPHTHA

*The Imperial Oil Co., Ltd., Toronto, Ont.

NICKEL CASTINGS

*International Nickel Co. of Canada, Ltd., Toronto.

NICKEL METAL

*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

*International Nickel Co. of Canada, Ltd., Toronto.

NICKEL OXIDE

*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

*Coniagas Reduction Co., Ltd., St. Catharines, Ont.

*International Nickel Co. of Canada, Ltd., Toronto.

NUTS

*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

*The National Acme Mfg. Co., Montreal, Que.

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

OAKUM, plumbers, Canadian Navy Factory Waste & Metal Co., Montreal, Que.

OAT CRUSHERS AND FLAKERS

J. Fleury's Sons, Aurora, Ont.

OFFICE CHAIRS, Etc.

The Macey Office Equipment Co., Toronto.

OFFICE DESKS

*Goderich Organ Co., Goderich, Ont.

OFFICE EQUIPMENT

Lowe-Martin Co., Ltd., Ottawa, Ont.

*Office Specialty Co., Newmarket, Ont.

OFFICE FURNITURE

*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

OILS

*A. Ramsay & Son Co., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS

*S. F. Bowser & Co., Toronto, Ont.

OIL STORAGE SYSTEMS, self-measuring

*S. F. Bowser & Co., Toronto, Ont.

OIL COMPANIES

*Canadian Oil Cos., Toronto.

Commercial Oil Co., Ltd., Hamilton, Ont.

*Imperial Oil Co., Toronto.

OILS (petroleum products)

*British American Oil Co., Ltd., Toronto, Ont.

*The Imperial Oil Co., Toronto.

OILS, road

*The Barrett Co., Ltd., Toronto and Montreal.

OILCLOTHS, floor and table

Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.

ORGANS

Casavant Freres, Limitee, St. Hyacinthe, Que.

*Goderich Organ Co., Goderich, Ont.

ORGANS, parlor

*Goderich Organ Co., Goderich, Ont.

ORGANS, pipe

Casavant Freres, Limitee, St. Hyacinthe, Que.

ORGANS, reed

Bell Piano & Organ Co., Ltd., Guelph, Ont.

ORNAMENTAL IRON WORK

*Canada Wire & Iron Goods Co., Hamilton, Ont.

*Dennis Wire & Iron Works Co., London, Ont.

*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.

*McGregor & McIntyre, Ltd., Toronto, Ont.

OVERALLS

Peerless Overall Co., Rock Island, Que.

Walker Pant & Shirt Co., Walkerville and Chatham, Ont.

OVERCOATINGS

Rosamond Woollen Co., Almonte, Ont.

OVERHEAD RUNWAYS

*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

*Richards-Wilcox Canadian Co. Ltd., London, Ont.

OXY-ACETYLENE WELDING

*L'Air Liquide Society, Montreal, Que.

*The Prest-O-Lite Co., Inc., Toronto

OXYGEN

Dominion Oxygen Co., Ltd., Toronto.

*L'Air Liquide Society, Montreal, Que.

PACKING BOXES

Barchard & Co., Ltd., Toronto.

PACKING, engine

*Garlock Packing Co., Hamilton, Ont.

PACKING, Metallic-Flexible

Beveridge Supply Co., Ltd., Montreal, Que.

PACKING, rubber

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

*Gutta Percha & Rubber Mfg. Co. of Toronto, Ltd.

*Jenkins Bros., Ltd., Montreal, Que.

PAD HOOKS

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

PAIS AND TUBS, wooden

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES

A. Muirhead Co., Ltd., Toronto.

PAINTS AND VARNISHES

A. Muirhead Co., Ltd., Toronto.

Benjamin Moore & Co., Ltd., Toronto, Ont.

Dominion Paint Works, Limited, Walkerville, Ont.

*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

The Staneland Co., Ltd., Victoria, B.C.

*A Ramsay & Sons Co., Montreal, Que.

Standard Paint Co. of Canada, Ltd., Montreal, Que.

PAINTS, preservative

Dominion Paint Works, Limited, Walkerville, Ont.

Standard Paint Co. of Canada, Ltd., Montreal, Que.

*The Barrett Co., Ltd., Toronto and Montreal.

PAPER BOARDS & BAGS

Beveridge Supply Co., Ltd., Montreal, Que.

PAPER BOXES

Standard Paper Box Company, Ltd., Montreal, Que.

King Paper Box Co., Ltd., Montreal, Que.

PAPER, coated, book and label

*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, coated box board

*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, coated cover

*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, envelope

*Provincial Paper Mills, Ltd., Georgetown, Ont.

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, enamelled blotting

*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, label

*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, ledger

*Howard Smith Paper Mills, Ltd., Montreal, Que.

*Rolland Paper Co., Ltd., Montreal, Que.

PAPERS, bond

*Howard Smith Paper Mills, Ltd., Montreal, Que.

*Rolland Paper Co., Ltd., Montreal, Que.

PAPERS, building

*Bathurst Lumber Co., Ltd., Bathurst, N.B.

*The Riordan Pulp & Paper Co., Montreal, Que.

Standard Paint Co. of Canada, Ltd., Montreal, Que.

PARLOR SUNDRIES

The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

PATENTS

Fetherstonhaugh & Co., Toronto.

*Ridout & Maybee, Toronto, Ont.

*Harold C. Shipman & Co., Ottawa, Ont.

PATENT LITIGATION

*Ridout & Maybee, Toronto, Ont.

*Harold C. Shipman & Co., Ottawa, Ont.

PAVING MATERIAL

*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

PAY ROLL AUDITS

*International Business Machines, Ltd., Toronto, Ont.

PERFORATED METALS

*Canada Wire & Iron Goods Co., Hamilton, Ont.

PERFORATED MUSIC ROLLS

The Otto Higel Co., Ltd., Toronto.

PERFUMES AND TOILET PREPARATIONS

Sovereign Perfumes, Ltd., Toronto.

PETROLEUM PRODUCTS

*The Imperial Oil Co., Ltd., Toronto, Ont.

PHOTO MAILERS

*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

PIANO ACTIONS

The Otto Higel Co., Ltd., Toronto.

PIANO KEYS

The Otto Higel Co., Ltd., Toronto.

PIANO, player actions

The Otto Higel Co., Ltd., Toronto.

PIANOS AND PLAYER PIANOS

Bell Piano & Organ Co., Ltd., Guelph, Ont.

PIANO STOOLS AND BENCHES

*Goderich Organ Co., Goderich, Ont.

PIG IRON

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

*M. A. Hanna & Co., Toronto.

*Algoma Steel Corporation.

PINS, society, emblems and badges

*Caron Bros., Montreal, Que.

PIPE, cast iron, for water and gas

National Iron Works, Ltd., Toronto, Ont.

PIPE COUPLINGS

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

PIPE COVERINGS

*Eureka Mineral Wood & Asbestos Co., Toronto, Ont.

PIPES, culvert

*The Pedlar People, Ltd., Oshawa, Ont.

PIPE AND NIPPLES, black and galvanized

*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer

Hamilton & Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.

PIPE, soil and fittings

Anthes Foundry, Ltd., Toronto and Winnipeg.

PISTON RODS

*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS

*Canada Machinery Corporation, Ltd., Galt, Ont.

*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

PLASTERING TROWELS

*E. C. Atkins & Co., Inc., Hamilton, Ont.

PLUMBERS' SUPPLIES

J. Fleury's Sons, Aurora, Ont.

*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

PLUMBERS' SUPPLIES

The Garth Co., Montreal, Que.

The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.

Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

POLE LINE MATERIAL (wooden insulator top pins, side blocks, pole steps, cross arms)

The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

POLES, flag

*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

POLISHING MACHINERY

*Ford Smith Machine Co., Ltd., Hamilton, Ont.

PORK PACKERS AND CHEESE EXPORTERS

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POWDER, blasting

Canadian Explosives, Ltd., Montreal, Que.

POWER TRANSMISSION MACHINERY

Dodge Manufacturing Co. of Canada, Ltd., Toronto.

POWER PRESSES

*Hydraulic Machinery Co., Ltd., Montreal, Que.

PRESSES, hydraulic

*The Hydraulic Machinery Co., Limited, Montreal.

PRESSES, sheet metal stamping

*Canada Machinery Corporation, Ltd., Galt, Ont.

PRESSES, veneer

*Canada Machinery Corporation, Ltd., Galt, Ont.

PRINTING AND LITHOGRAPHING

Lawson & Jones, Ltd., London, Ont.

The Federated Press, Limited, Montreal, Que.

PRINTING & LITHOGRAPHIC INKS.

Charles Bush, Limited, Toronto.

PULLEYS

*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

PULLEYS, Fibre

*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

PULLEYS, wood split

*Bernard Industrial Co., Fortierville, P.Q.

PULLEYS, Wood Split, Iron and steel.

Dodge Manufacturing Co. of Canada, Ltd., Toronto.

PULP, bleached sulphite

*Riordan Sales Co., Ltd., Montreal.

PULP, unbleached sulphite

*Riordan Sales Co., Ltd., Montreal.

PULP, sulphate and sulphite

*Bathurst Lumber Co., Ltd., Bathurst, N.B.

PULP AND PAPER MILL MACHINERY

*The Hydraulic Machinery Co., Limited, Montreal.

PUMPS

*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

*E. Leonard & Sons, Ltd., London, Ont.

*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

Spramotor Co., London, Ont.

*The Electric Steel & Metals Co., Ltd., Welland, Ont.

PUMPS, boiler feed

*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

PUMPS, centrifugal

Ltd., Walkerville, Ont.

*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

*Canadian Mead Morrison Co., Ltd., Montreal, Que.

*Dominion Engineering Works, Limited, Montreal, Que.

*Dominion Forge & Stamping Co., Ltd., Galt, Ont.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

- PUMPS, hydraulic**
*The Hydraulic Machinery Co., Limited, Montreal.
- PUMPS, turbine and reciprocating**
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
- PUNCHES**
*Pratt & Whitney Co., Dundas, Ont.
- RADIATORS**
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.
- RAILS (STEEL)**
*Algoma Steel Corporation.
- RAILINGS, brass and iron**
*Dennis Wire & Iron Works Co., London, Ont.
- RAILWAY SUPPLIES**
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.
- READY-TO-WEAR GARMENTS, ladies'**
H. C. Boulter Co., Ltd., Toronto.
- REAMERS**
*Pratt & Whitney Co., Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.
- RECEPTACLES, fibre**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- REFRIGERATORS**
Sanderson-Harold Co., Ltd., Paris, Ont.
- REFRIGERATING MACHINERY**
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
- REFRIGERATING EQUIPMENT**
Canadian Ice Machine Co., Ltd., Toronto, Ont.
- REFRIGERATORS, store, homes and institutions**
Ham & Nott Co., Ltd., Brantford, Ont.
*John Hillock & Co., Ltd., Toronto.
- REINFORCEMENT BARS**
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- REINFORCED CONCRETE**
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
- REINFORCEMENT FOR CONCRETE**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
- REINFORCEMENT FOR CONCRETE ROOFING, metal**
*The Pedlar People, Ltd., Oshawa, Ont.
- REVOLVING DOORS**
*A. B. Ormsby Co., Ltd., Toronto.
- RINGS, gold**
*Caron Bros., Montreal, Que.
- RIVETS**
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- RIVETS, bifurcated and tubular**
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
- RIVETS AND BUEES, iron, copper and brass**
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
- ROCK DRILLS**
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
- ROLLING STEEL DOORS**
*A. B. Ormsby Co., Ltd., Toronto.
- ROOFING, metal**
*A. B. Ormsby Co., Ltd., Toronto.
- ROOFINGS, plastic, liquid, rubber**
Beveridge Supply Co., Ltd., Montreal, Que.
- ROOFING, ready to lay**
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.
- ROOF TRUSSES**
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.
- ROPE**
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.
- ROPE, cotton**
Hamilton Cotton Co., Hamilton, Ont.
- RUBBER FOOTWEAR**
*Gutta Percha & Rubber Ltd., Toronto, Ont.
The Miner Rubber Co., Ltd., Grandy, Que.
Ames—Holden—McCready, Limited, Montreal, Que.
- RUBBER GOODS**
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Limited, Toronto.
Ames—Holden—McCready, Limited, Montreal, Que.
- RUBBER MACHINERY**
*The Hydraulic Machinery Co., Limited, Montreal.
- RUBBER MILL MACHINERY**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- RUBBER PACKING**
*Garlock Packing Co., Hamilton, Ont.
- RULES**
The Lufkin Rule Co. of Canada Ltd., Windsor, Ont.
- SADDLERY HARDWARE**
*Dominion Forge & Stamping Co., Walkerville, Ont.
- SAFES**
*Goldie & McCulloch Co., Ltd., Galt, Ont.
- SALT**
*Canadian Salt Co., Ltd., Windsor, Ont.
Dominion Salt Co., Ltd., Sarnia, Ont.
- SAMPLE CASES**
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.
- SAND (For all Purposes)**
Carrol Brothers, Sherkston, Ont.
J. Eveleigh & Co., Ltd., Montreal, Que.
- SAND HAMMERS**
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
- SANITARY PAPER TOWELS**
*E. B. Eddy Co., Ltd., Hull, Que.
- SASH CORD, cotton**
Hamilton Cotton Co., Hamilton, Ont.
- SAVE-ALLS**
*The Hydraulic Machinery Co., Limited, Montreal.
- SAW SHARPENING MACHINERY**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- SAWS**
*E. C. Atkins & Co., Ltd., Hamilton, Ont.
Henry Disston & Sons, Ltd., Toronto, Ont.
Shurly & Deitrich, Galt, Ont.
- SAWS, cross-cut and band**
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.
- SAWS, circular mill**
Shurly & Deitrich, Galt, Ont.
- SAWS, of all kinds**
Simonds Canada Saw Co., Ltd., Montreal, Que.
- SAWS, rip**
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.
- SAWMILLS**
*The Watrous Engine Works Co., Ltd., Brantford, Ont.
- SCALES**
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
- SCREENS**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
- SCREEN DOORS AND WINDOWS**
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.
- SCREENS; Folding Draft**
The Stratford Mfg. Co., Limited, Stratford, Ont.
- SCREWS**
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*National Acme Company, Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Torrington Company, Limited, Upper Bedford, Que.
- SCREW PLATES**
*Butterfield & Co., Rock Island, P.Q.
- SEATS; Park and Grand Stand**
The Stratford Mfg. Co., Limited, Stratford, Ont.
- SECURITIES, engraved**
American Bank Note Co., Ottawa, Ont.
- SERGES**
Rosamond Woollen Co., Almonte, Ont.
- SEWAGE DISPOSAL SYSTEMS**
Anthes Foundry, Ltd., Toronto.
- SEWAGE SCREENS**
*The Hydraulic Machinery Co., Limited, Montreal.
- SHAFTING**
*Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
- SHANTY BLANKETS**
Slingsby Mfg. Co., Ltd., Brantford, Ont.
- SHAPERS**
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
- SHEAR BLADES, iron**
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.
- SHEATHING**
*The Barrett Co., Ltd., Toronto and Montreal.
- SHEATHING, asbestos corrugated**
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
- SHEET METAL STAMPINGS**
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
- SHEETS, fibre**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- SHEETS, galvanized**
*Dominion Sheet Metal Co., Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
- SHINGLES**
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
- SHINGLE SAWS**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- SHINGLE STAINS**
Sturgeons, Limited, Toronto.
- SHIP BUILDERS**
J. & R. Weir, Montreal, Que.
- SHIRTS**
John W. Peck & Co., Ltd., Montreal, Que.
- SHIRTS, workmen's**
*A. R. Clarke & Co., Ltd., Toronto.
- SHOE PEGWOOD**
O. Chailfour, Quebec, Que.
- SHOE LININGS**
Galt Knitting Co., Ltd., Galt, Ont.
- SHOOKS**
Barchard & Co., Ltd., Toronto.
- SIGNAL CELLS-RAILWAY**
*Canadian National Carbon Co., Ltd., Toronto.
- SILENT CHAIN DRIVES**
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
- SILVER BULLION**
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
- SILVERSMITH**
Standard Silver Co., Toronto, Ont.
- SILVERWARE, sterling**
Roden Bros., Ltd., Toronto, Ont.
- SINKS, enamelled**
Amherst Foundry Co., Ltd., Amherst, N.S.
- SKIFFS**
Peterboro Canoe Co., Ltd., Peterboro, Ont.
- SKYLIGHTS**
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.
- SLOTTERS**
*Canada Machinery Corporation, Ltd., Galt, Ont.
- SMOKE CONSUMERS**
*Under-Feed Stoker Company of Canada, Limited, Toronto.
- SMOKE-STACKS**
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, Limited, London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
- SOAPS**
J. Barsalou & Co., Ltd., Montreal.
- SOAP (soft, oil)**
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
- SODA ASH**
Brunner, Mond Canada, Limited, Amherstburg, Ont.
- SODA WATER FOUNTAINS**
J. J. McLaughlin, Ltd., Toronto.
- SODA WATER FOUNTAINS AND ACCESSORIES**
Fletcher Mfg. Co., Ltd., Toronto.
- SOIL PIPE**
Anthes Foundry, Ltd., Toronto.
- SOLDER**
Alonso W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.
- SOLDER, silver**
Geo. H. Lees & Co., Hamilton, Ont.
- SOLDER, wire and bar**
American Can Co., Montreal, and Hamilton.
- SNOWSHOES**
Holt, Renfrew, Ltd., Quebec, Que.
- SPECIAL MACHINERY**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- SPECIALTIES, SWAGED AND THREADED WIRE**
*Torrington Company, Limited, Upper Bedford, Que.
- SPELTER**
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.
- SPIRAL CONVEYORS**
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
- SPLIT PEAS**
H. Murton, Ltd., Guelph, Ont.
- SPOOLS**
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
- SPORTING MEDALS AND TROPHIES**
Roden Bros., Ltd., Toronto, Ont.
- SPRAYERS**
Spramotor Co., London, Ont.
- SPRING COTTERS**
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
- SPRINGS**
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
- SPRINGS, carriage and automobile**
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
- SPRING SHACKLE BOLTS**
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

SPRINKLER SYSTEMS

- *Chicago Bridge & Iron Works, Bridgeburg, Ont.
- *The Bennett & Wright Co., Ltd., Toronto, Ont.
- *Purdy, Mansell, Ltd., Toronto.

SPROCKET WHEELS

- *Canadian Link-Belt Company, Ltd., Dodge Manufacturing Co. of Canada, Toronto, Ont.

STAINS, creosote shingle

- A. Muirhead Co., Ltd., Toronto.

STAMPS, steel, brass and rubber

- Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMPINGS, steel, brass, aluminum, etc.

- Larsen & Shaw, Ltd., Walkerton.

STATIONERY, office

- Harris Lithographing Co., Toronto.

STEAM PIPE AND BOILER COVERINGS, asbestos

- *Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS

- *Canadian Mead Morrison Co., Ltd., Montreal, Que.

STEAM SPECIALTIES

- *C. A. Dunham Co., Ltd., Toronto.

STEAM TRAPS

- *C. A. Dunham Co., Ltd., Toronto.

STEEL

- *Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
- *Burlington Steel Co., Ltd., Hamilton, Ont.
- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.

STEEL BILLETS AND BLOOMS

- *The Steel Co. of Canada, Ltd., Hamilton, Ont.

STEEL BUILDINGS

- *The Canadian Bridge Co., Ltd., Walkerville, Ont.
- *Dominion Bridge Co., Ltd., Montreal, Que.
- *Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
- *Maritime Bridge Co., Ltd., New Glasgow, N.S.
- *McGregor & McIntyre, Ltd., Toronto, Ont.
- *MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
- *The Pedlar People, Ltd., Oshawa, Ont.
- *The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL CASTINGS

- Beauchemin & Fils, Ltd., Sorel, Que.
- *Canadian Steel Foundries, Ltd., Montreal, Que.
- *Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
- *Electric Steel & Metals Co., Ltd., Welland, Ont.

STEEL DOORS, rolling

- *The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL FILING EQUIPMENT

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

STEEL LATH

- *Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL PLATE WORK

- *Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
- *Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
- *Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
- *MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
- *Toronto Iron Works, Ltd., Toronto.

STEEL RODS

- *The Steel Co. of Canada, Ltd., Hamilton, Ont.
- *Algoma Steel Corporation.

STEEL SASH

- *Canadian Metal Window & Steel Products, Limited, Toronto.
- *Dennis Wire & Iron Works Co., London, Ont.
- *The A. B. Ormsby Co., Ltd., Toronto, Ont.
- *Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL SHELVING

- *Dennis Wire & Iron Works Co., London, Ont.

STEEL WIRE RODS

- *The Steel Co. of Canada, Ltd., Hamilton, Ont.

STELLITE

- *Deloro Smelting & Refining Co., Ltd., Deloro and Toronto.

STENCILS, brass

- Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING

- Central Press Agency, Toronto.

STOKERS

- *Under-feed Stoker Co. of Canada, Ltd., Toronto, Ont.

STOOLS, steel factory

- *Steel Trough & Machine Co., Ltd., Tweed, Ont.

STORAGE BATTERIES

- *Prest-O-Lite Company of Canada Limited, Toronto.

STORE FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES

- Smith Foundry Co., Ltd., Fredericton, N.B.

STOVE POLISH GRAPHITE

- Black Donald Graphite Company, Limited, Calabogie, Ont.

STOVES AND RANGES

- *McClary Mfg. Co., London, Ont.

STRAWS, paper drinking

- Fletcher Mfg. Co., Ltd., Toronto

STRUCTURAL STEEL

- *Algoma Steel Corporation.

STRUCTURAL STEEL WORK

- *Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- *Dominion Bridge Co., Montreal.
- *Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
- *McGregor & McIntyre, Ltd., Toronto, Ont.
- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.
- *The Canadian Bridge Co., Ltd., Walkerville, Ont.

SUIT CASES

- J. Eveleigh & Co., Ltd., Montreal.
- *The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto, Ont.

SULPHUR BURNERS

- *The Hydraulic Machinery Co. Limited, Montreal.

SUPERHEATERS, steam

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

SUPERHEATERS, STEAM (Locomotive, Marine, Stationary)

- The Superheater Company, Limited, Transportation Building, Montreal, Quebec.

SUPPLY DEALERS

- *The Foundation Co., Ltd., Montreal, Que.

SURFACERS

- *Canada Machinery Corporation, Ltd., Galt, Ont.
- *P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SWITCHES, railway

- Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS

- *Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS

- Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

TABLE COVERS, chenille

- Hamilton Cotton Co., Hamilton, Ont.

TANKS

- *Canadian Chicago Bridge & Iron Company, Ltd., Bridgeburg, Ont.
- *Canadian Des Moines Steel Co., Limited, Chatham.
- *Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
- *E. Leonard & Sons, Ltd., London, Ont.
- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.
- *Maritime Bridge Co., Ltd., New Glasgow, N.S.
- *Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *The Gould Shapley & Muir Co., Limited, Brantford, Ont.
- *The Watrous Engine Works Co., Ltd., Brantford, Ont.
- *Toronto Iron Works, Ltd., Toronto.
- Wm. H. White, Ville St. Pierre, Montreal, Que.

TANKS, elevated steel

- *Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
- *Canadian Des Moines Steel Co. Limited, Chatham.

TANKS, steel storage

- *Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- *Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.
- *Steel Trough & Machine Co., Ltd., Tweed, Ont.

TANNERS' OILS & GREASES

- Salem Oil & Grease Co. of Canada, Limited, Farnham, Que.

TANNERS' SUPPLIES

- *McClary Mfg. Co., London, Ont.

TAPS

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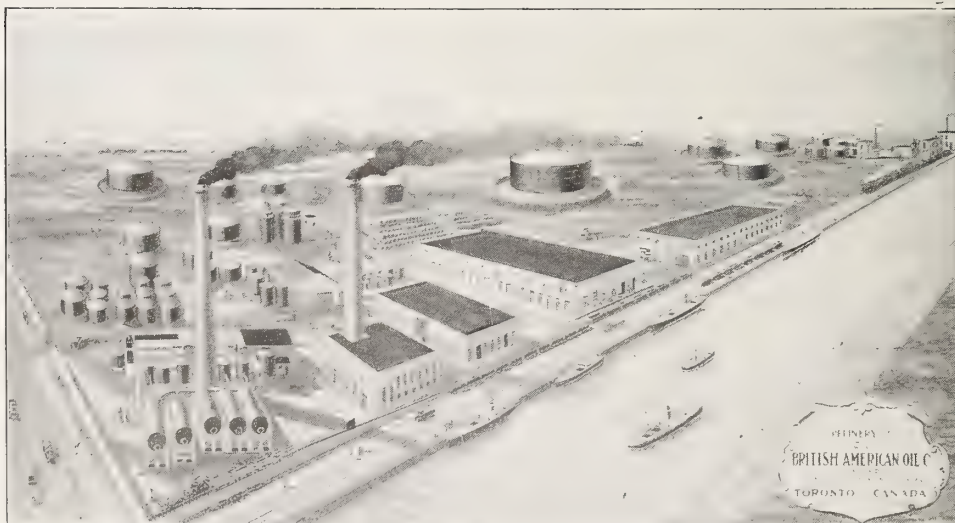
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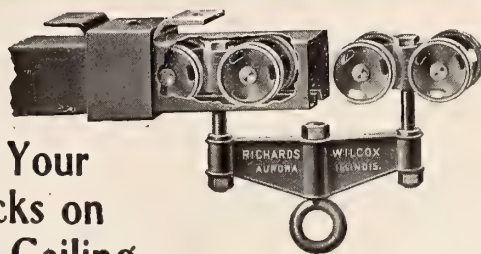
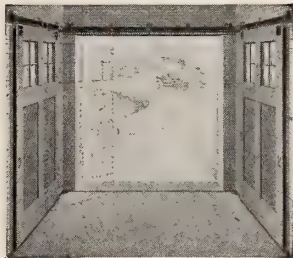


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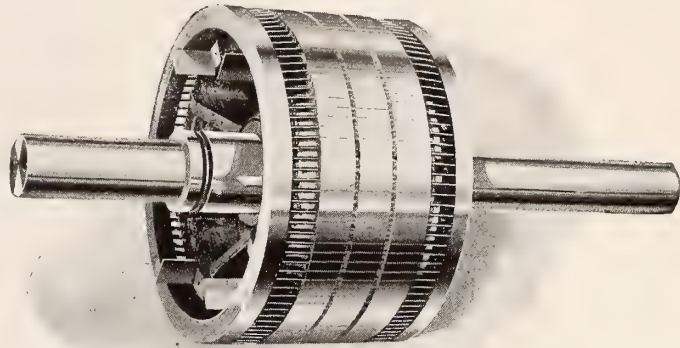
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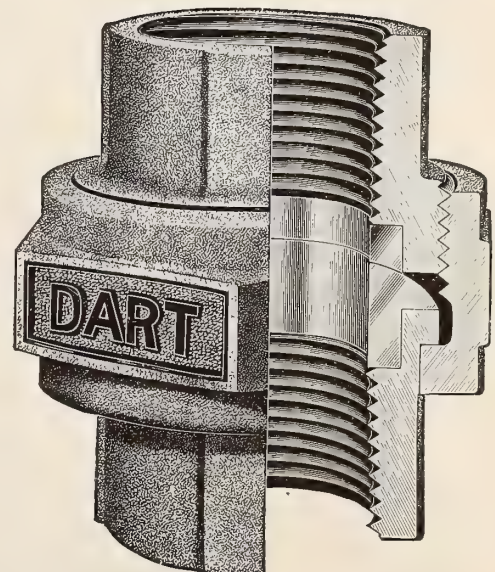
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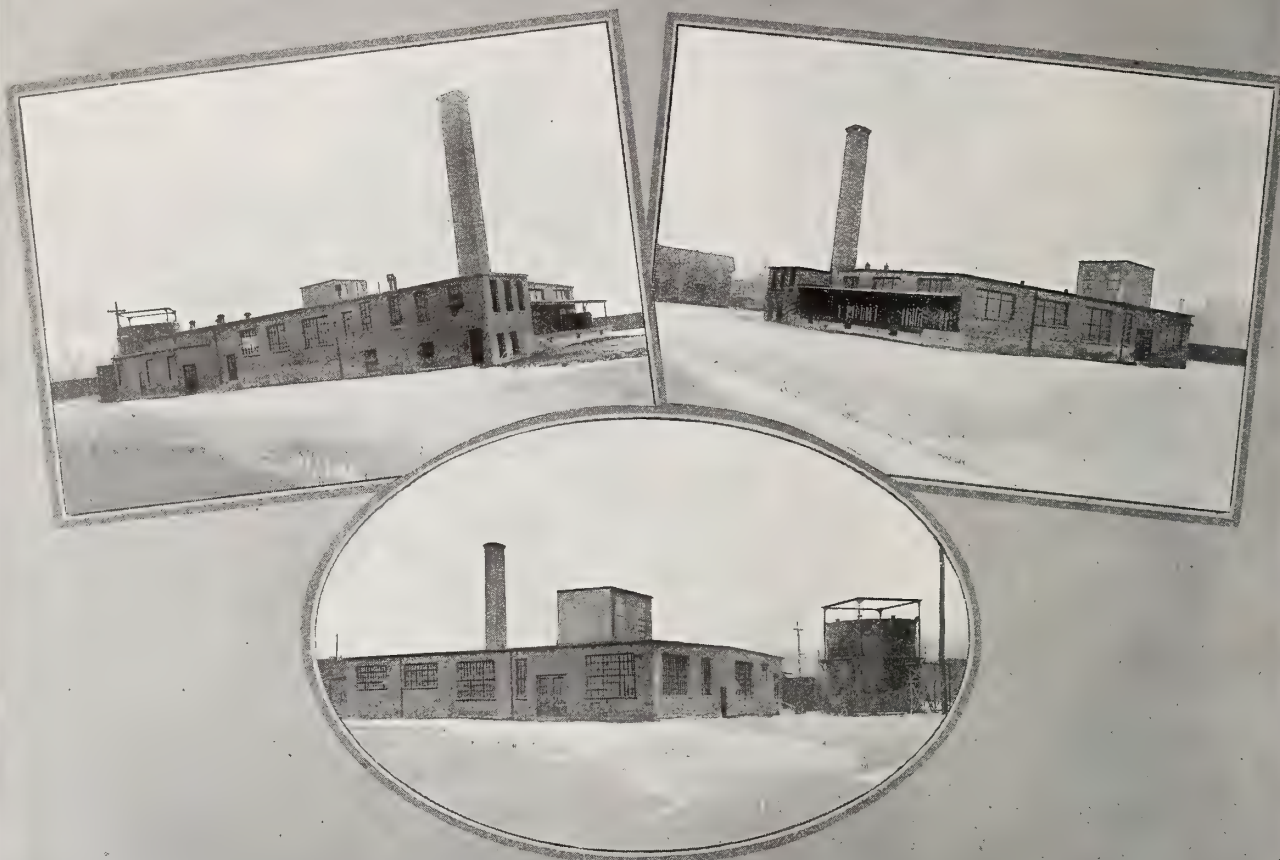
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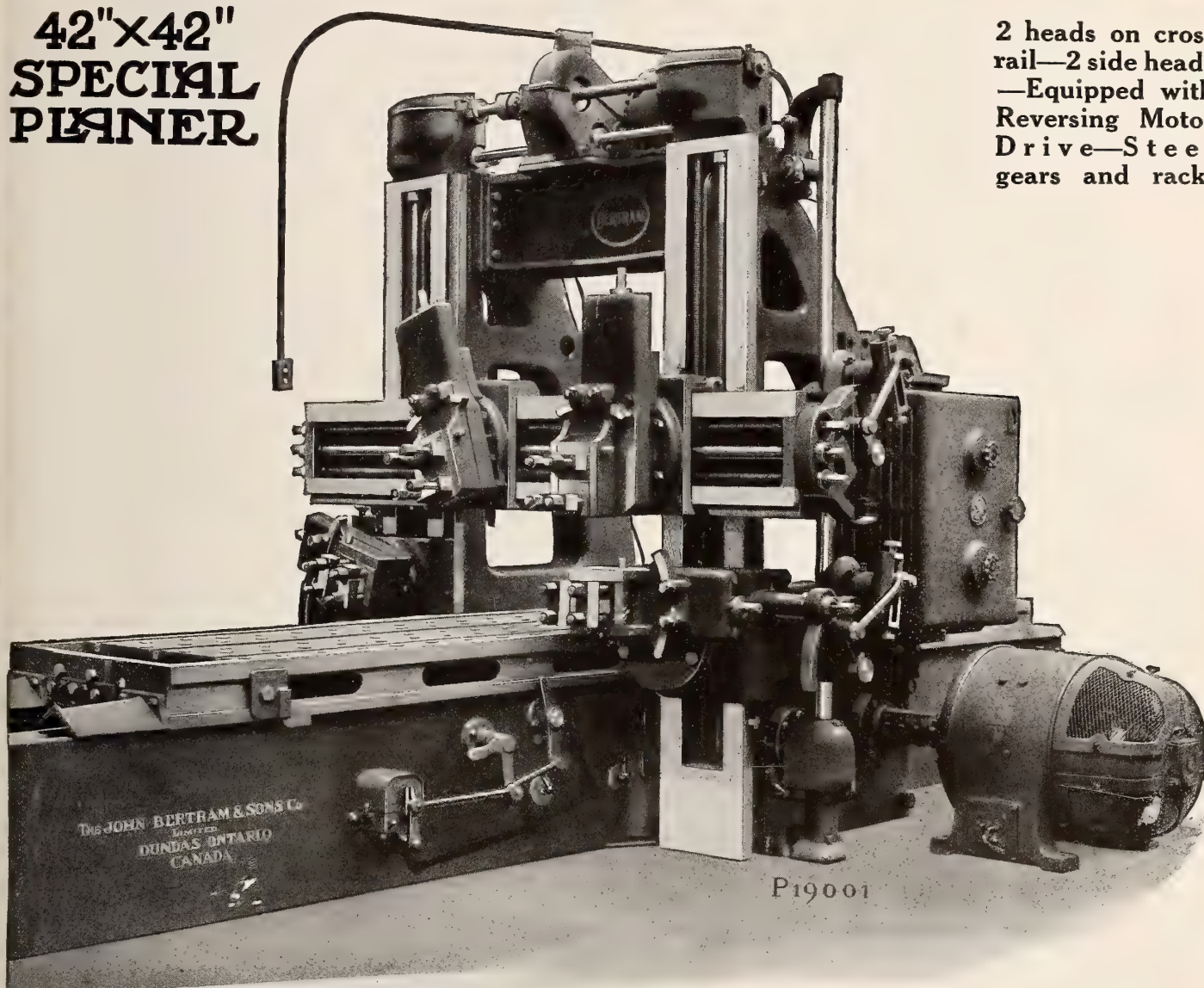
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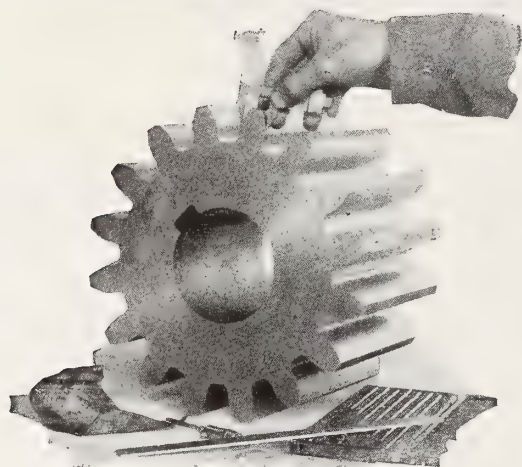
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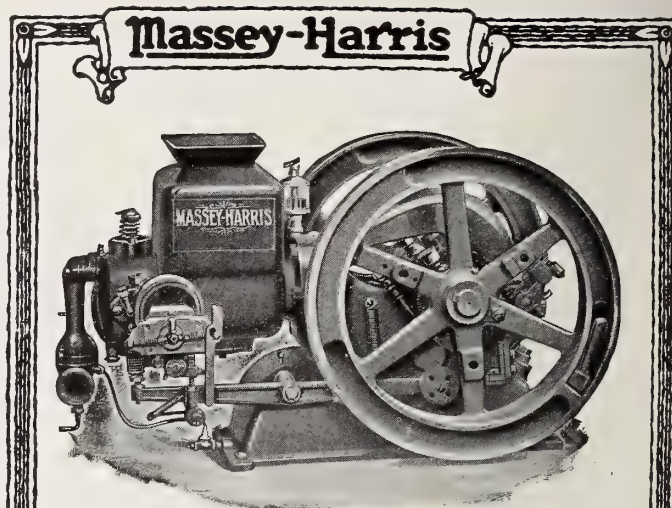
Diametral Pitch	Tooth Thickness at Pitch Line	Whole Depth	Dedendum	Addendum
1	1.5708	2.1571	1.1571	1.0000
1 1/4	1.2566	1.7257	0.9257	0.8000
1 1/2	1.0472	1.4381	0.7714	0.6666
1 3/4	0.8976	1.2326	0.6612	0.5714
2	0.7854	1.0785	0.5785	0.5000
2 1/2	0.6283	0.8628	0.4628	0.4000
3	0.5236	0.7190	0.3857	0.3333
3 1/2	0.4488	0.6163	0.3306	0.2857
4	0.3927	0.5393	0.2893	0.2500
5	0.3142	0.4314	0.2314	0.2000
6	0.2618	0.3595	0.1928	0.1666
8	0.1963	0.2696	0.1446	0.1250
10	0.1571	0.2157	0.1157	0.1000
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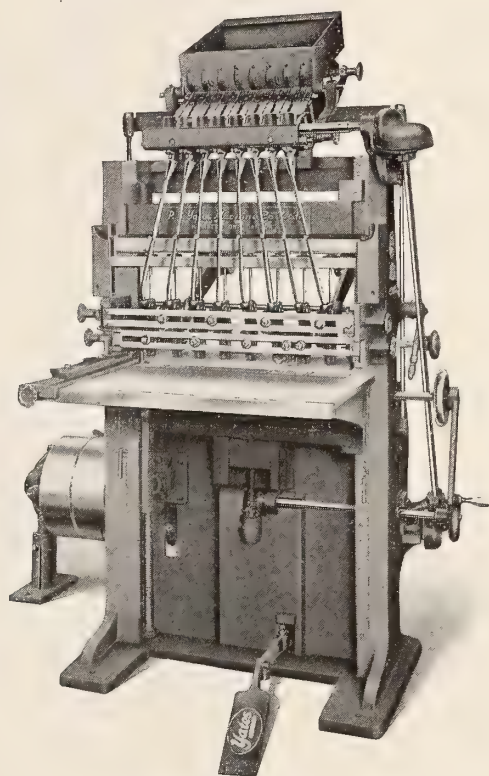
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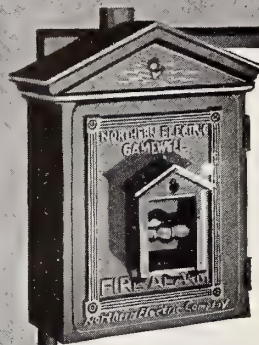
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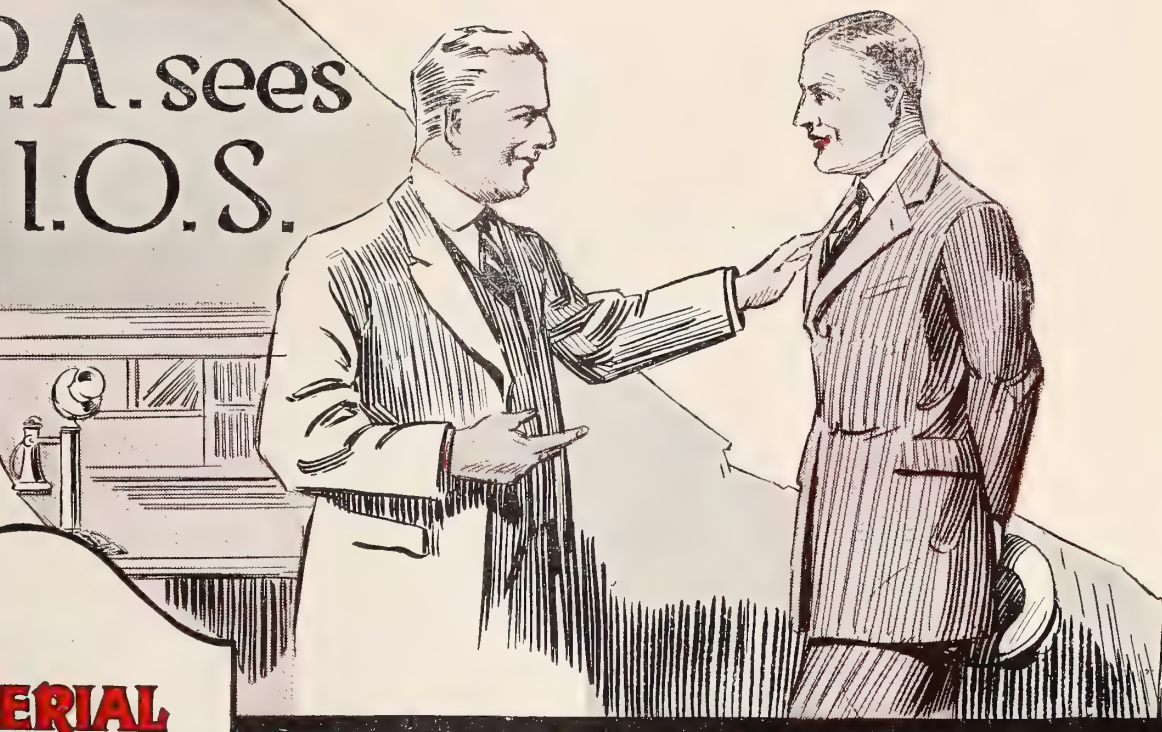
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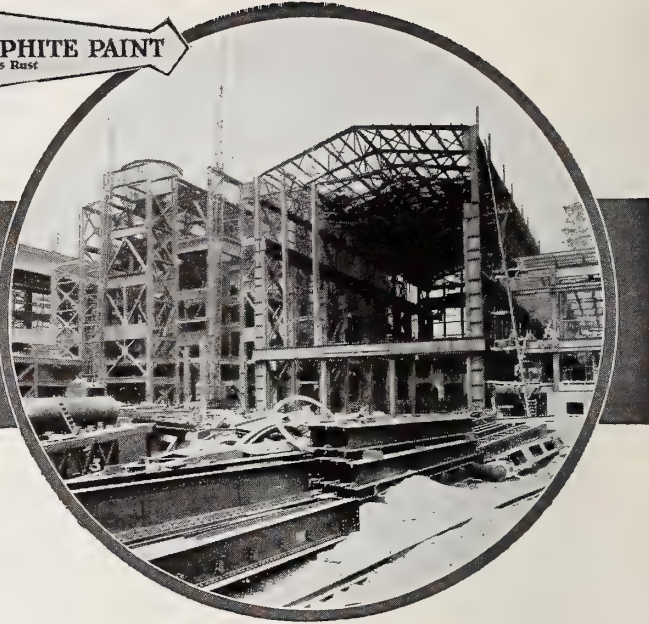
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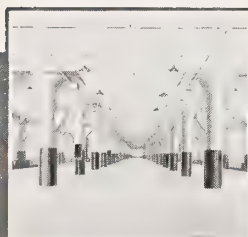
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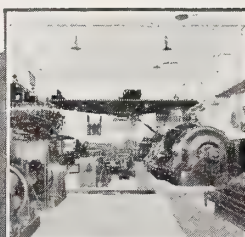
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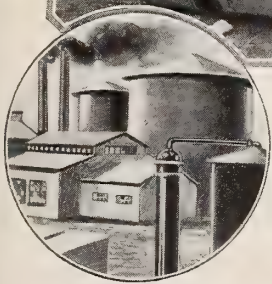
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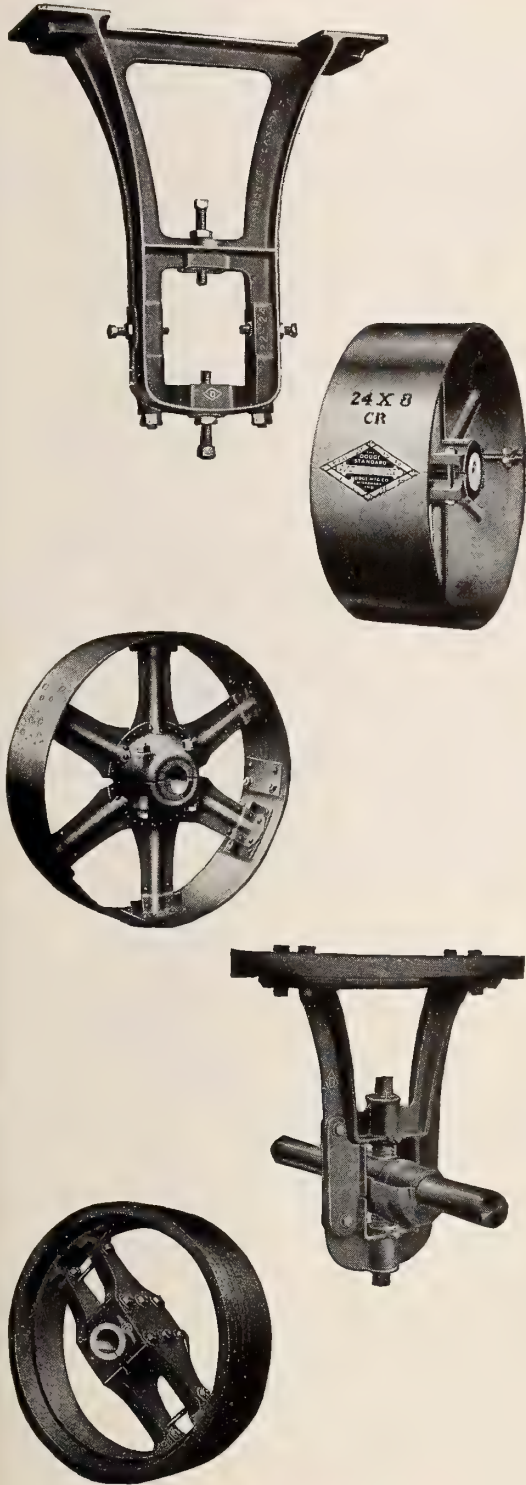
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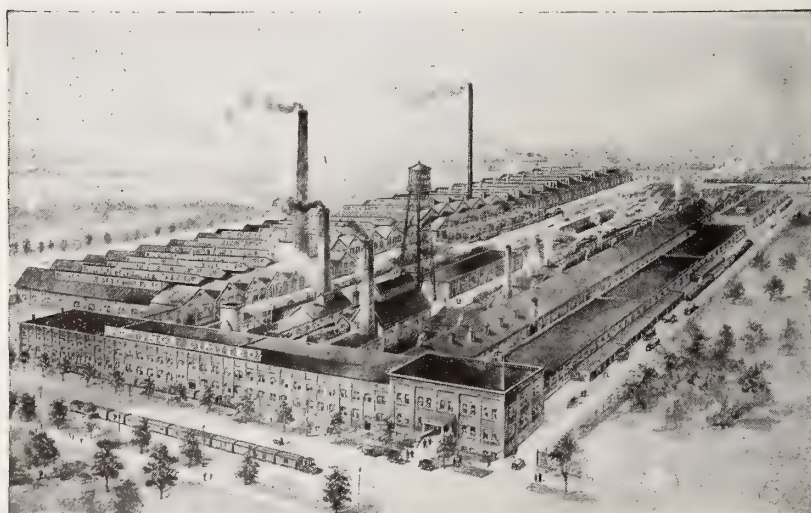
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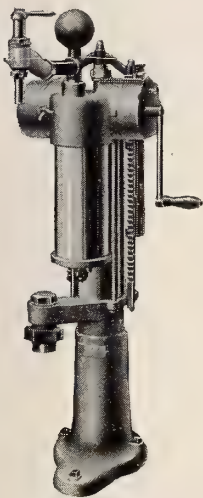
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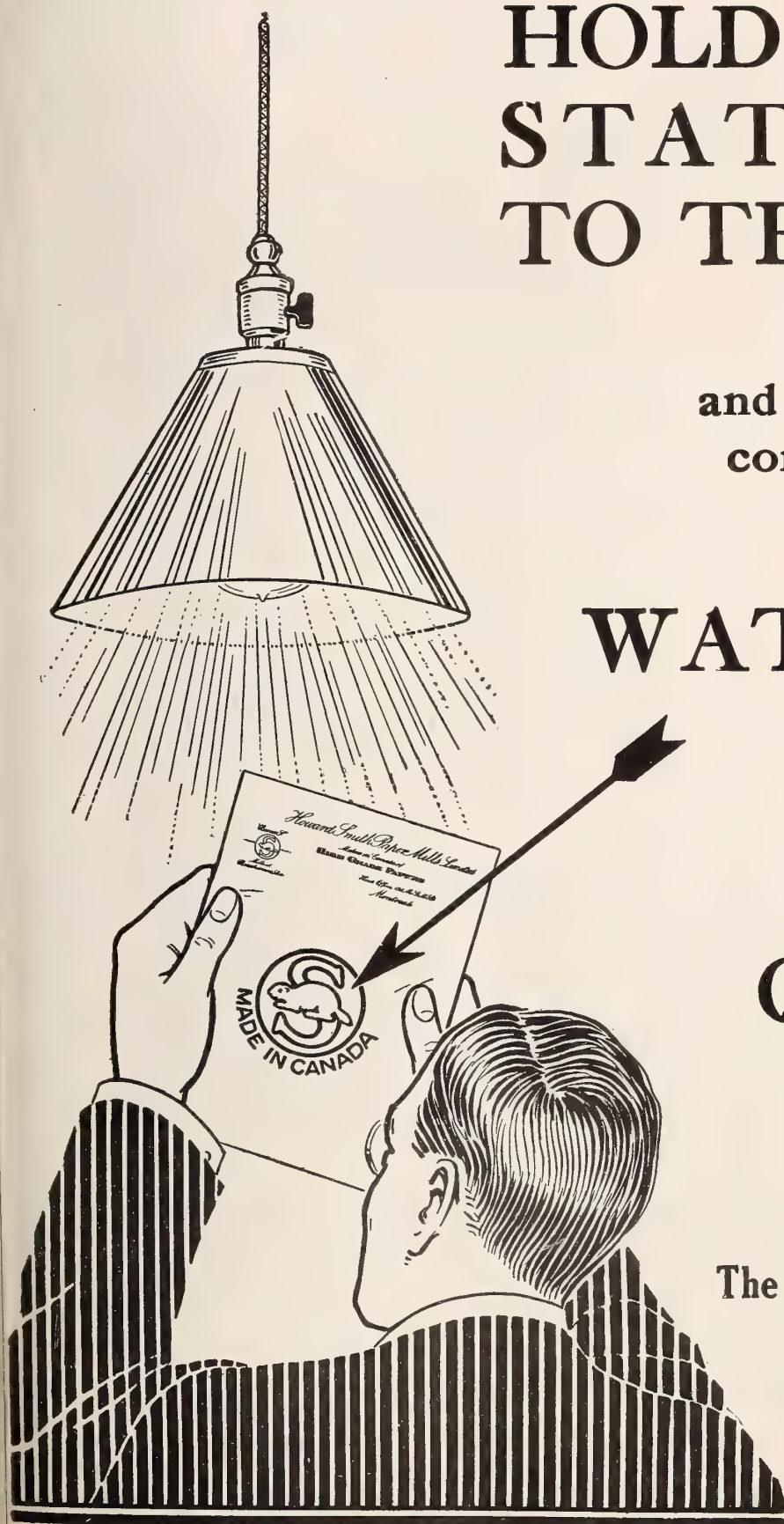
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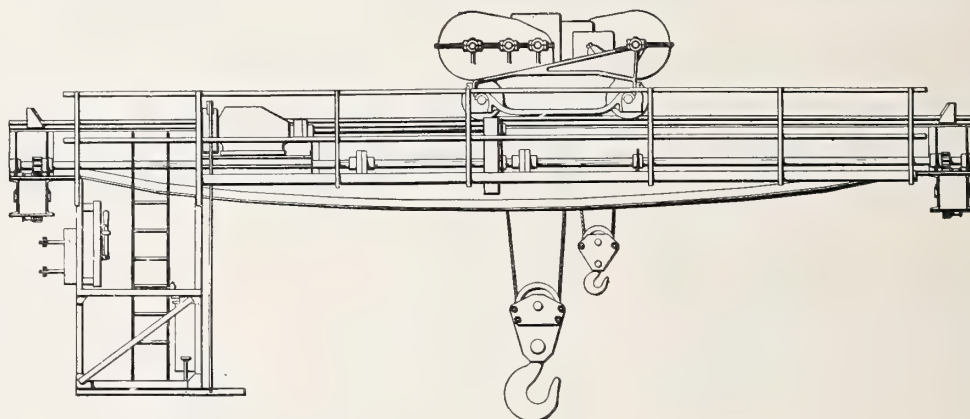
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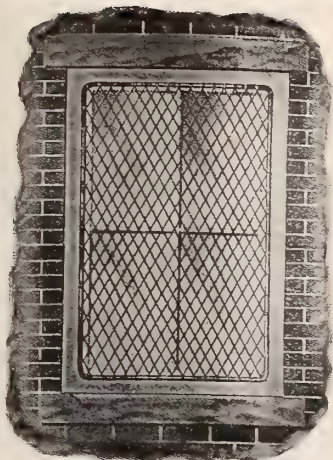
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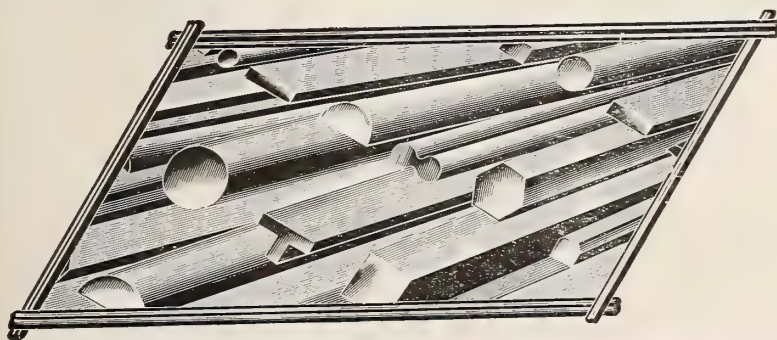
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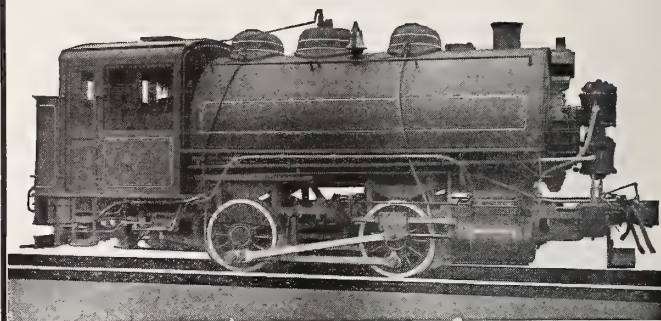
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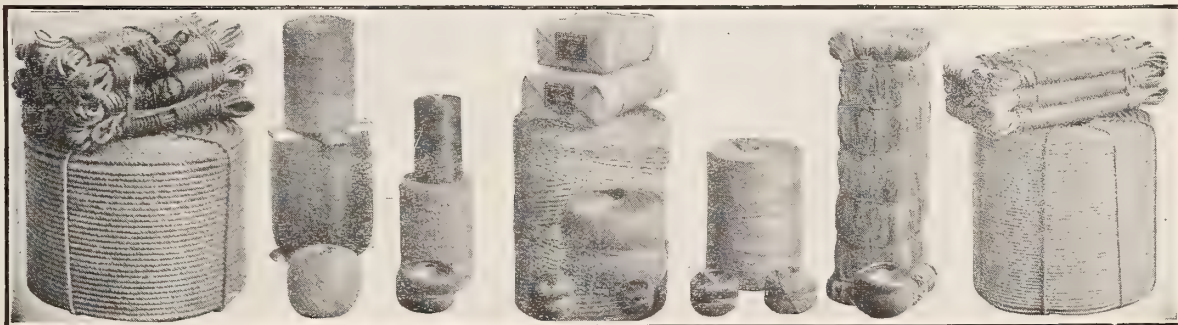
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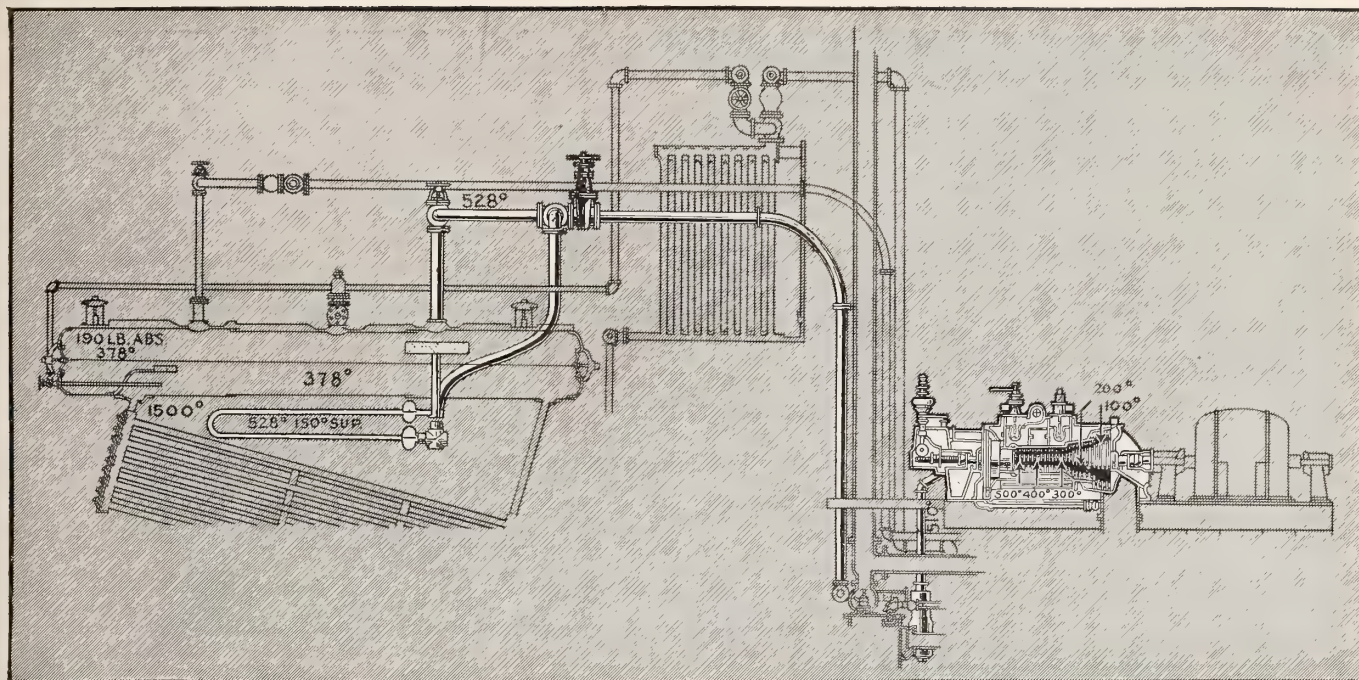
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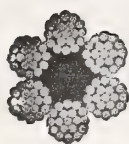
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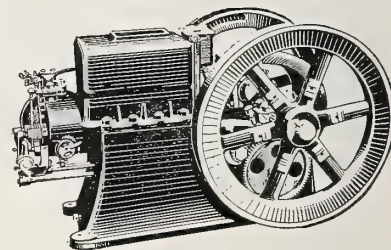
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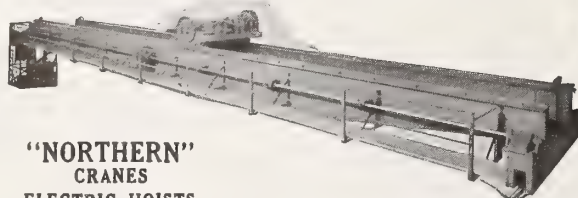
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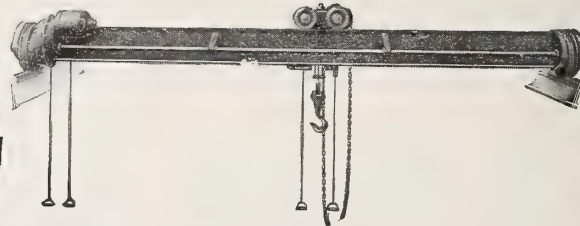
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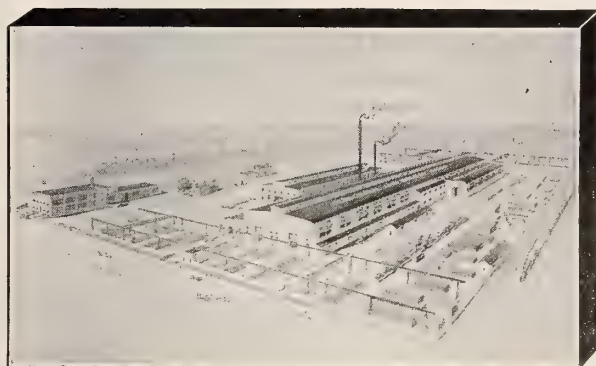
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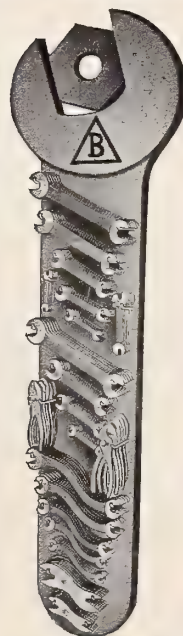
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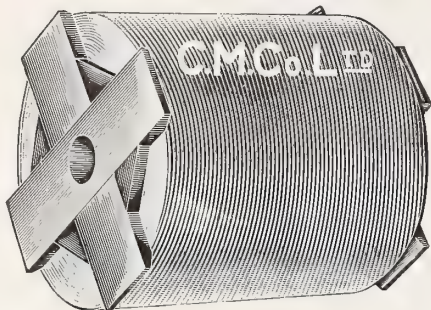


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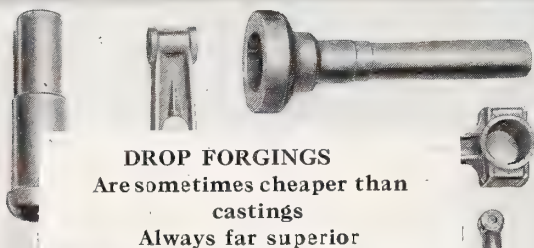
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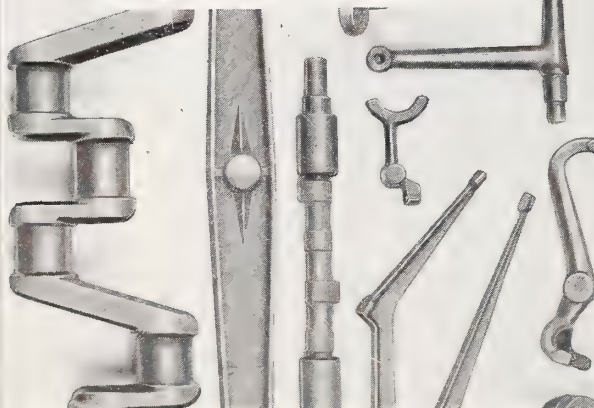
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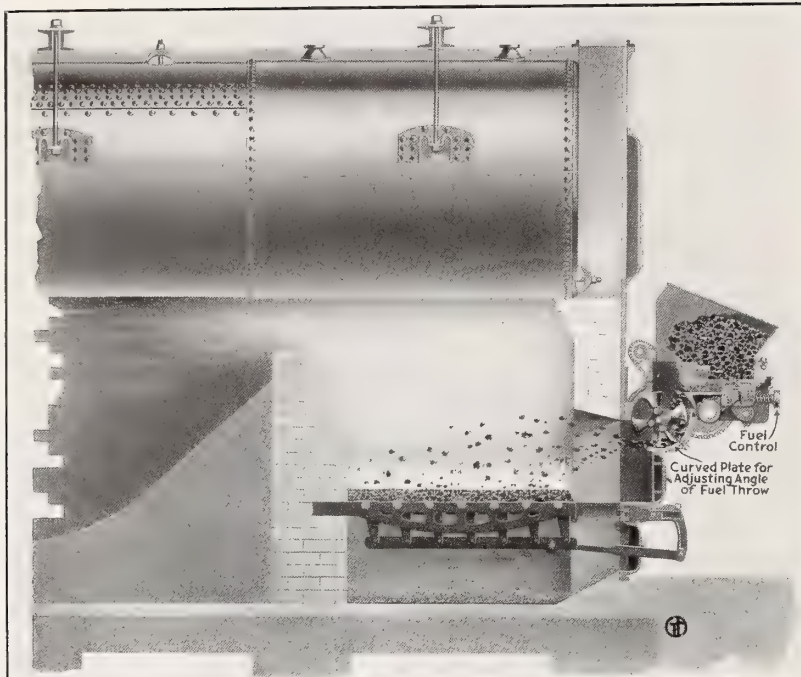
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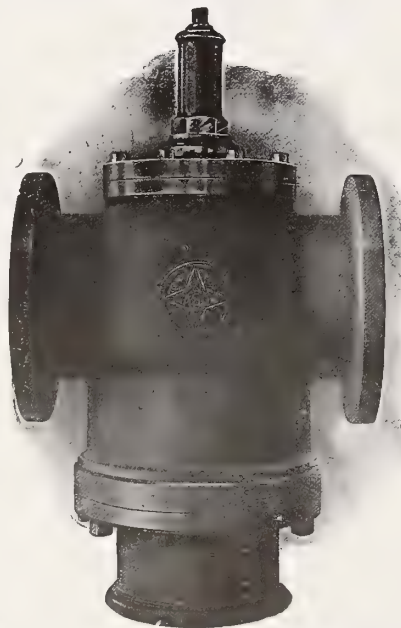
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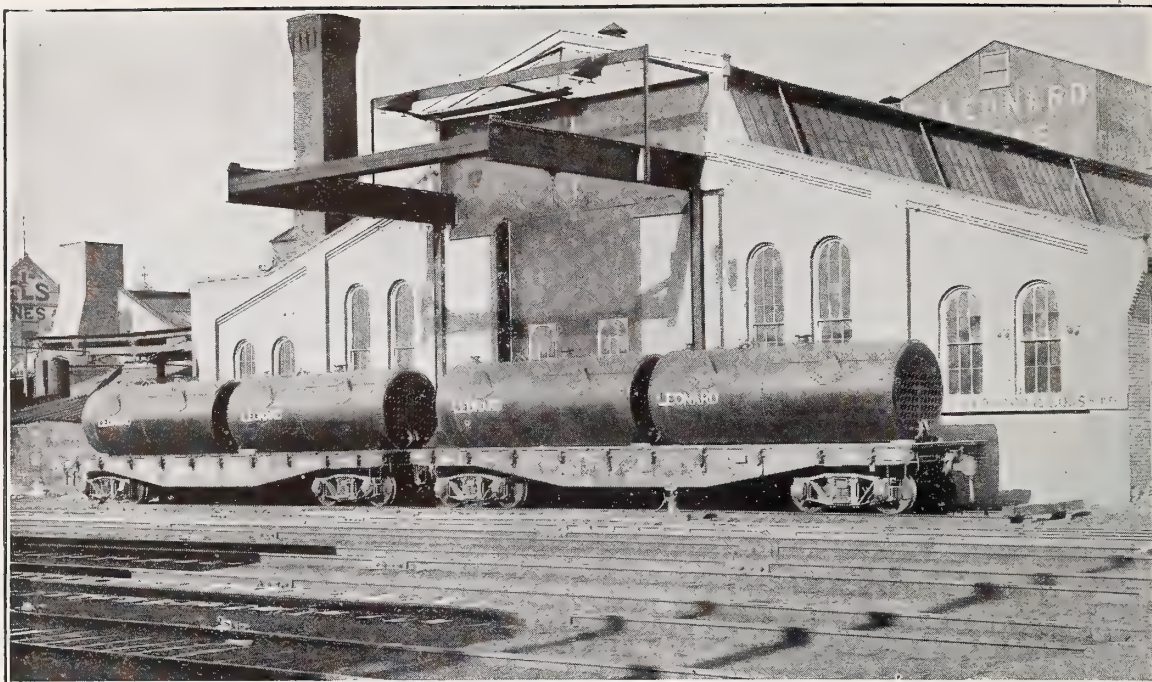
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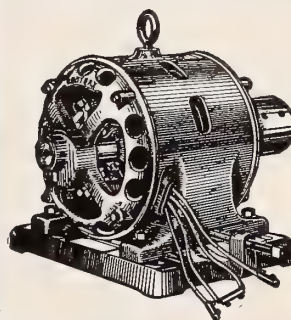
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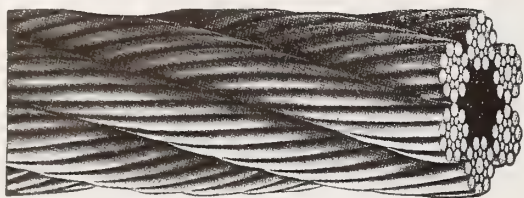
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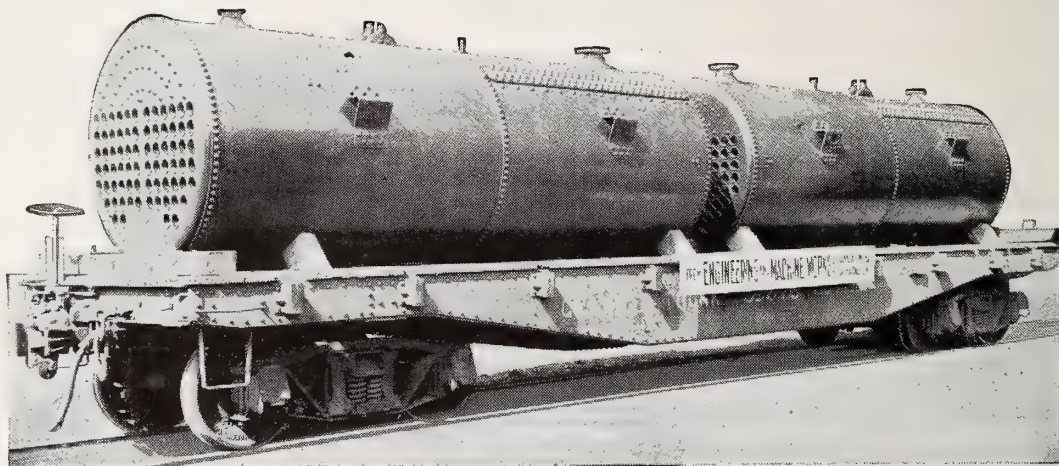
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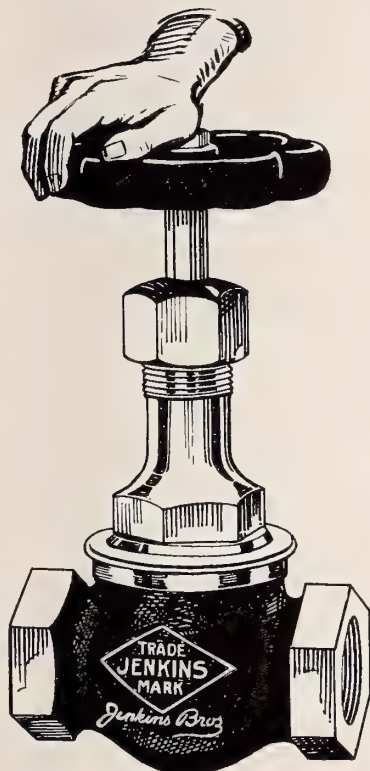
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2. Special Eveready Mazda lamp of increased brilliancy and power.

3. Shock absorber to prevent breaking of lamp.

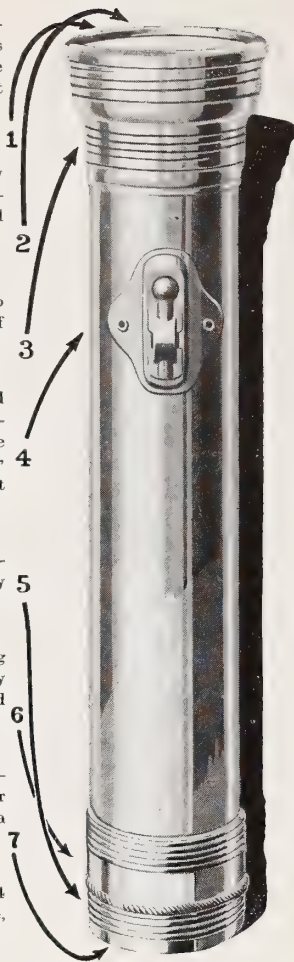
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Pedestal and Wall-Mounting Type K-1 Auto Starters

Insure greater safety to operator.—Give greater reliability in operation.—Afford the best protection to expensive machinery and reduce the expense of upkeep and installation.

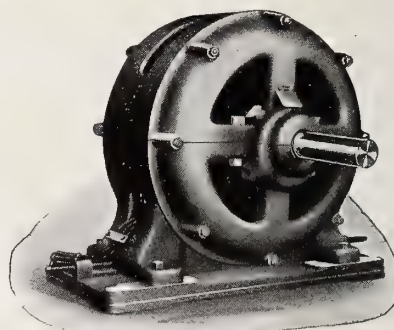
The Type K-1 Auto-Starter has the following important features:

1. All parts are mounted on a rigid cast-iron base machined and drilled in jigs, which assure interchangeability.
2. It has a low-voltage relay mounted inside the case. This relay, on failure of the voltage, automatically disconnects the motor.
3. At a slight increase in price an overload relay is provided, equipped with a regulating device which permits the amount of the overload being adjusted to suit the requirements. This relay is also mounted inside the case.
4. It has auto-transformers so designed as to allow changing from light to heavy-duty starting in a few minutes.
5. It can be installed either with or without conduit.
6. It requires minimum expense for installation three wires to the motor and three to the source of power on three-phase motors.
7. It has instructions for operating on the name plate.

8. The handle cannot be pushed to the running position without first being put in starting position.

9. It will not remain in the running position unless there is sufficient voltage on the line to operate the motor.

10. All parts are visible and accessible by removing the cover and tank.



Type HS Induction Motor



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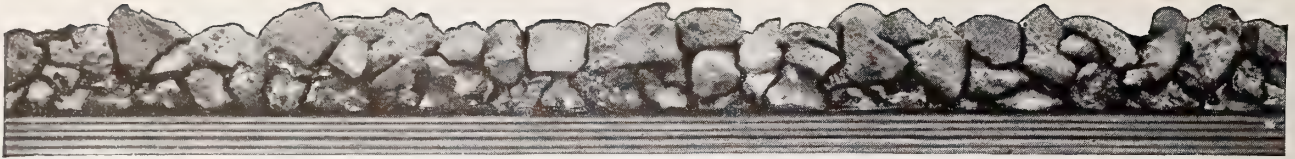
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1404 BANK OF HAMILTON BUILDING
TORONTO



Cross-section of a Barrett Specification Roof. Note the uniform distribution of Pitch between the layers of Felt.

Right Construction is *Half* the Roof—

STUDY the illustrations at the right. In these the successive steps in the building-up of a Barrett Specification Roof over concrete are graphically shown. The Barrett Specification describes in detail the manner in which the roof shall be laid, because *right construction is just as important as the use of right materials.*

The Barrett Specification Roof for flat or nearly flat roofed buildings, consists of several alternate layers of Specification Pitch and Specification Felt, with a surface covering of gravel or slag. These materials are used because 60 years' experience has proved—

- that no other bitumen has the weather-resisting properties of this high grade pitch;
- that no other kind of felt has the lasting tensile strength of this carefully selected felt;
- that no other surfacing material renders a roof so highly fire-resistant as gravel or slag which serves the further purpose of holding in place the extra-thick poured top coat of Barrett Specification Pitch.

Have your roofing contract call for the 20- or 10-year Surety Bond Guaranty. This is issued free of charge through the U. S. Fidelity and Guaranty Company of Baltimore. Then you will be sure that Barrett Specification materials will be applied, in sufficient quantities and by proper methods. For all Barrett Specification Bonded Roofs are constructed under the watchful eye of an experienced Barrett inspector who is present on the job to see that the Specification is strictly complied with.

Before specifying or closing contract for a Barrett Specification Roof, be sure to read carefully all the stipulations in the Specification.

Full details regarding these Bonded Roofs and copies of The Barrett Specifications sent free on request.

The **Barrett** Company

LIMITED

MONTREAL

TORONTO

WINNIPEG

VANCOUVER

ST. JOHN, N.B.

HALIFAX, N.S.



The concrete roof-deck is heavily mopped with a uniform coating of Barrett Specification Pitch.



Right: Laying the Barrett Specification Tarred Felt on the pitch seal coat. Four plies with pitch in between are laid over the entire roof surface, each ply overlapping three-fourths of the preceding ply.

Left: Mopping the Barrett Specification Pitch. Each layer of felt is hermetically sealed to the adjoining layer by the pitch waterproofing. In no spot do the layers touch each other.



Below: Pouring final coat of hot Barrett Specification Pitch and embedding thick wearing surface of gravel or slag after entire roof has received four plies of felt and pitch.



Barrett Specification Roofs

Bonded for 20 and 10 Years

When writing advertisers please mention INDUSTRIAL CANADA.

Industrial Canada

ISSUED BY

The Canadian Manufacturers Association
INCORPORATED

Vol. XXIII.

TORONTO, DECEMBER 1921

No. 8

Editorial Comment

The Canadian Products Annual Review Number.

PREPARATIONS are again under way for the publication at the first of the year of the Canadian Products Annual Review Number of INDUSTRIAL CANADA. This number has now taken an established place among the year-end reviews and is regarded in a sense as the official estimate of conditions in Canada so far as industrial activity is concerned. The 1922 issue will follow very largely the plan of previous issues and will deal with each of the more important departments of manufacturing industry, giving a review of conditions during the year that is closing and a forecast of probable developments in the year that is about to commence.

We would request members of the Association who are accustomed to co-operate with us in the compilation of this special number to give early attention to the requests for information which have been sent out. The success of the number depends largely on the extent to which it reflects the views of industry as a whole and previous numbers have owed not a little of their value to the comprehensive nature of the information which they have contained. In this respect, we hope to make the 1922 edition even more complete than its predecessors.

Silk Purses from Sow's Ears.

ONCE again the romance that is inherent in all industry, if viewed from the right angle, has been abundantly demonstrated. The old adage—"You can't make a silk purse of a sow's ear,"—has been proved false. Industry, assisted by the industrial chemist, has done the seemingly impossible.

In a small booklet just issued, Arthur D. Little, Inc., tell the fascinating story of how they contrived, just as a diversion, to turn sow's ears into a very handsome lady's silk purse. It is not our intention to repeat the story, though it would make entertaining reading. The point is that it all goes to prove the value of properly directed research.

Arthur D. Little, Inc. did not embark on this enterprise with any idea that they would start a sow's ear silk industry. Satisfactory silk is already available from other sources and in much greater quantity than would be possible from utilizing the hoofs, horns or ears of animals. What they did propose was to show that the industrial chemist is not to be discouraged by the repetition of such expressions as, "It isn't practical", "It can't be done", "We have no time for theories." These are great handicaps to progress and, if it can be proved in one case, that they are wrong, then it stands to reason that in other cases, opinion will be shaken and an attempt will at least be made to achieve results.

The Marking of Imported Goods.

OBJECTIONS have been voiced to the provisions of the act requiring goods imported into Canada to be marked with the name of the country of origin. Some of these objections appear to have been well-founded. They have been remedied to a large extent by recent revisions of the regulations. Other objections, particularly to the general principle of the measure, are not so well taken.

The impression has been given in some quarters that Canada is doing something quite unique in attempting to enforce a marking act and that its requirements will work a great hardship on the exporters of countries shipping goods to Canada. This is not the case. As the Tariff Department points out in a recent circular, the Canadian law in effect is practically identical with the United States general marking act which has been in force for many years. Indeed, the general marking act of the United States is amplified by separate and very strict provisions which appear in various tariff items as, for example, those dealing with importations of knives and other cutlery and with watches and clocks.

If Canadian exporters in sending their goods to other countries are required to mark these goods as of Canadian manufacture, it is surely not unfair to require similar action on the part of the exporters of these countries when they ship their goods to Canada. In fact, we are of the impression that Canadian manufacturers are rather



A Bird that would be Missing.

Cartoon by Racey in the *Montreal Star*

proud to mark their goods, "Made-in-Canada", regarding it as a good advertisement.

As it is, the Marking Act is necessary for the enforcement of the depreciated currency legislation of last session and also for the success of the British preferential tariff and of special treaty rates of duty, so that its enforcement should be regarded as highly desirable and advantageous.

Effect of the Emergency Tariff.

THE External Trade Branch, Bureau of Statistics is doing a useful service in compiling a special table each month showing the exports of those commodities of domestic production which are affected by the United States Emergency Tariff Act. This act, it will be recalled, went into effect towards the end of May. It has therefore been operative for six months,—a period sufficiently long to give a fairly good idea of its influence on Canada's trade with the United States. The extent of this influence has been great. Month by month, in comparison with the corresponding months of 1921, substantial reductions have been recorded.

The latest figures issued by the Department are those for the month of October and the five-month period, June to October. The value of October exports shows a decline, as compared with October, 1920, from \$28,619,682 to \$7,329,028. The greatest reduction was in wheat. In 1920, we exported 8,311,789 bushels worth \$20,705,051 and in 1921, only 1,650,045 bushels, worth \$2,109,962.

Exports of cattle were also lower, 45,188 head worth \$3,543,439 going out in 1920 and 25,425 head worth \$669,404 in 1921. On the other hand, it is to be noted with satisfaction, that in spite of increased duties, exports of cheese increased from 74,546 lbs. to 1,224,121 lbs. and of butter from 479,250 lbs. to 942,176 lbs. Increases are also to be noted in flax seed, apples and cream.

The five-month period, however, is the better gauge of the result. Here we have such an astounding decline as from 49,560,864 lbs. to 11,730 lbs. in sugar; from 4,105,432 lbs. to 1,285,088 lbs. in butter; from 19,966,200 lbs. to 12,627,500 lbs. in fresh or frozen meat; from 1,707,420 lbs. to 601,525 lbs. in preserved meats; from 8,354,725 lbs. to 1,195,385 lbs. in preserved milk and from 9,965,010 bush. to 3,401,816 bush. in wheat. In values, the total fell from \$62,166,044 to \$17,399,096.

That the application of the emergency tariff has had this effect is not surprising. It has been a measure designed to protect the United States farmer and this it appears to be doing. The lesson for Canada is one of greater self-reliance and the more rapid building up of a home market which will compensate for these losses.

A Parliament of Business Men.

A WIDE range of subjects was discussed by the annual convention of the Associated Boards of Trade and Chambers of Commerce of Ontario last month at Brantford. This parliament of business men, assembled from all the principal cities and towns of the province, is becoming of increasing importance as a mouthpiece for the views of the commercial community and its pronouncements on questions of the day affecting the business interests of the country are gathering year by year increasing weight.

The convention encountered real difficulty when it took up the question of relief for the live stock industry of Western Canada. It was suggested, as a temporary solution, that a reduction in freight rates on live cattle for export should be sought. No sooner was this suggestion voiced than the more general question of reduced freight rates thrust itself forward and the convention at once came face to face with one of the biggest obstacles to trade revival that exists. That it proved a hard nut to crack was evidenced by the fact that no resolution was attempted on the question, the matter being left over for the new executive to tackle.

It developed in the discussion that the underlying cause of high freight rates was high wages. It was argued that, if the government were approached for a reduction in the rates on cattle, the immediate reply would be, what other business would be prepared to take a higher rate in order to make up the deficiency and enable the railways to maintain the present wage scales. The obvious rejoinder was that it couldn't be done. The onus accordingly lay with the leaders of organized labor and until they were persuaded that a lowering of wages will be of general benefit, not only to business but to labor itself, little relief could be hoped for.

Another disability under which business is laboring was brought to the fore at Brantford. This had to do with inequalities in methods of assessment and taxation, which were having the effect of driving commercial and industrial establishments out of the province. The convention passed a strong resolution urging the provincial government to call together a conference of representatives of municipalities, boards of trade, chambers of commerce and other commercial organizations to discuss taxation in all its phases and make such recommendations as will tend to create uniformity of assessment and taxation in the province.

The Freezing of Fire Appliances.

A TIMELY bulletin directing attention to the dangers incidental to the freezing of fire extinguishing apparatus has been issued by the National Fire Protection Association, Boston. The bulletin points out that a very small "freeze-up", may destroy the efficiency of very large equipment and adds that unless extreme vigilance is exercised the very best installation of fire appliances may suffer temporary disablement from frost. Automatic sprinkler systems, hydrants and all appliances using water for fire extinguishing naturally require special care and attention in winter and in manufacturing establishments particularly it is most desirable that early attention should be given to precautions that will safeguard plants against this danger. Elsewhere in this issue we reproduce the portion of the bulletin dealing with sprinkler equipment, fire pumps and hydrants, in the hope that it may be of service to our readers.

Books and the Made-in-Canada Campaign.

CANADIAN Book Week, which was held for the first time during the last week of November, is but another manifestation of the spirit which has been giving the Made-in-Canada movement such impetus during the past year. The Canadian author, who writes, and the publisher, who manufactures, a book in Canada, have quite as much interest in seeing that their productions receive appreciative support from the Canadian public as have the manufacturers and producers of other articles of commerce.

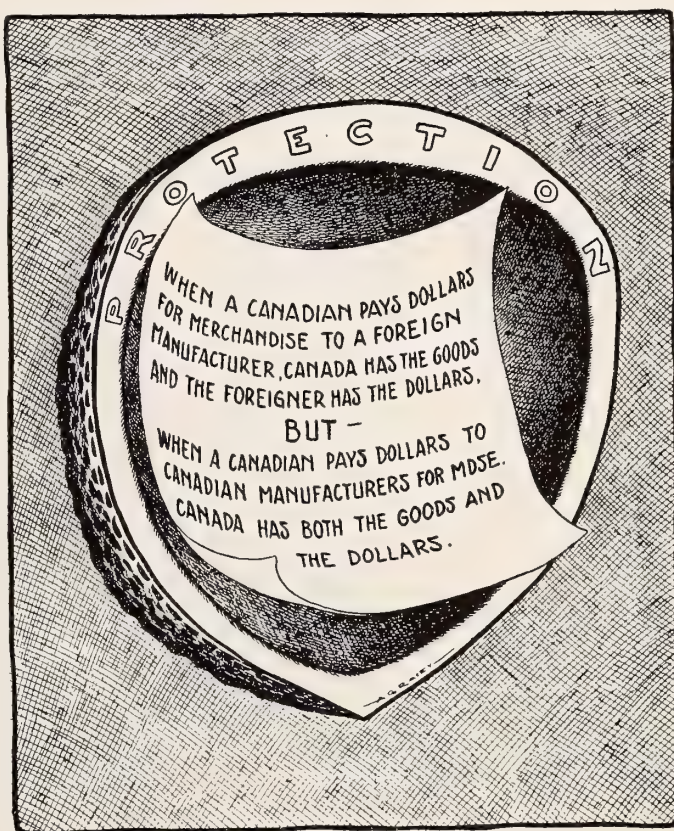
The Dominion has to-day within its borders a considerable number of talented writers. In the past, the Canadian author has had unfortunately to seek his or her laurels in the larger literary marts of New York and London. The present movement, expressed in Canadian Book Week, has had for object the securing of wider recognition for our literary producers at home. This is being achieved through well-planned publicity, culminating in an appeal to Canadians to buy the products of Canadian brains when making their year-end book purchases.

The Canadian manufacturer has also an interest in

this movement in that it means a larger production of books in Canadian printing plants with all that that involves in the way of consumption of paper, ink, bindery materials, etc. The smallness of the market in the past and the lack of appreciation of books by native writers has kept down the output of Made-in-Canada books. We have imported our reading matter very largely from the British and United States markets. If it is possible to work up a greater interest in domestic publications, then there will be a corresponding increase in the number of books manufactured in Canada. In this, the author and the manufacturer have a common interest.

A complaint sometimes voiced is that the Canadian printer and binder is incapable of producing volumes comparable in style and workmanship with those imported. This complaint might have had foundation years ago. It no longer applies. There are Canadian plants to-day producing books, printed on Canadian-made paper, which are quite the equal of any imported books of similar character. Indeed, the Canadian book manufacturer has progressed just as far in the perfection of his work as has the manufacturer of other goods.

The movement to induce Canadians to buy books of Canadian authorship merits hearty support. It should also be linked up, as far as possible, with an effort to secure a wider circulation for books of Canadian manufacture.



In a Nutshell.

Cartoon by Racey in the *Montreal Star*

A Milling Problem.

A STRONG point was made by Brig.-Gen. Labelle, president of the Canadian National Miller's Association, in his address before the annual convention of that organization last month in Toronto, when he urged that special export rates should apply on flour as well as on wheat.

General Labelle pointed out that Canada's milling capacity was nearly 30,000,000 barrels yearly, while the domestic market absorbed only 8,000,000 barrels. Last year exports, while better than in pre-war years, fell under 7,000,000 barrels. The great discrepancy between capacity and exports naturally reflected adversely on the industry and should be lessened as far as possible. He did not suggest that all wheat should be exported in the shape of flour but he felt that a better record was desirable.

The trouble, according to his diagnosis, lay in the fact that from time to time special export rates were made on wheat by steamship or railway lines in order to meet special conditions. The result was that wheat could be laid down on the other side at a price with which flour could not compete, the difference in the freight being in some cases more than the profit of the mills.

Rates made to favor both wheat and flour will help everyone, he argued. The farmer will obtain better prices for his grain, a larger supply of mill-feeds, which is absolutely necessary to enable him to increase cattle raising, and greater production of butter and cheese. All this increased production will be felt by everybody and will result in lower prices to the consumer, increased export in all these commodities, more freight to handle and improvement in exchange.

Canada's Mineral Production.

WHILE on the whole the statistics of Canadian mineral production for the first six months of the year are rather discouraging, there are one or two bright features to be noted. For instance, the output of lead and of zinc have shown signs of increasing to an extent which will presumably carry the production of these metals considerably beyond the 1920 level. Lead was produced to a total of 32,875,616 lbs. in six months, compared with 35,953,717 lbs. for the entire twelve months of 1920. Zinc production totalled 28,236,103 lbs. for the six months and 39,863,912 for the twelve months. In percentages the six-months' output of lead was 91.44 per cent. and of zinc 70.83 per cent. of the total for 1920.

Commenting on the production of lead, the Bureau of Statistics' report says,—“The demand for the metal has been fairly good, a considerable quantity finding its way into the manufacture of type metals, babbitts and solders, and for the manufacture of corroded white lead as well as in the production of lead shot and other forms used as ammunition. The silver-lead ores of British Columbia furnish by far the greater part of the lead during the period but appreciable amounts were also recovered from lead ores mined in Ontario and Quebec. Canada's foreign trade in lead shows an appreciable decline in imports dur-

ing the six months' period, the total for this year being only about one-tenth of the value of lead and its products imported during the calendar year 1920. Exports on the other hand during the six months were more than double the amount of the twelve months of the preceding year. It will be seen that the lead mining industry in Canada has been able to maintain its position even in the face of declining prices and commercial depression.”

The report shows that the output of coal from Canadian mines during the first six months of 1921 declined to 86 per cent. of the amount produced during the corresponding period of 1920 but was 5 per cent. in excess of the output for the same period during 1919. With the exception of New Brunswick, none of the provinces showed an output equal to the 1920 record.

Having regard to importations, the data show that Canada as a whole imported 104 per cent. of the amount of anthracite coal brought in during the same period in 1920, and 132 per cent. of the bituminous. Quebec was the only province which imported less anthracite during the six months than in the same period, 1920. Exports of Canadian coal have declined from the base figure of 100 for the six months ending June 30, 1920, to 68 for the same period during the present year. In 1919, the corresponding index number was 74. Total exports for the Dominion amounted to 869,004 tons this year, as compared with 1,278,957 tons in same period last year.

Endorses Made-in-Canada Campaign.

IT is encouraging to find that the Employment Service Council of Canada has given official recognition to the principle of buying Made-in-Canada goods as a remedy for unemployment. The Council, which is representative of employers, employees, farmers, returned soldiers, provincial governments, the Department of Soldiers' Civil Re-establishment and the Dominion Department of Labor, is charged with the duty of recommending to the Minister of Labour ways of preventing unemployment. At its last meeting, held in September, it passed the following resolution,—

“WHEREAS the importation of foreign goods which could have been produced in Canada has been in part responsible for the present unemployment problem, and

“WHEREAS a continuation of the purchase of imported goods will tend to accentuate the problem, and

“WHEREAS the purchase of Made-in-Canada goods will furnish work to Canadian artisans thereby assuring improved working conditions, lessening unemployment and keeping Canadian money in circulation in the Dominion.

“THEREFORE the Employment Service Council of Canada recommends to the purchasing public the desirability, when prices are fair, of demanding goods produced in Canada, and with the object of giving the widest possible publicity to this recommendation instructs its Secretary to correspond with the press of Canada requesting the insertion of editorials and news items dealing with this phase of the situation.”

The recommendation contained in the resolution received the approval of the Minister of Labour and last month the press of Canada was invited by Bryce M. Stewart, Secretary of the Employment Service Council of Canada, to extend its co-operation in bringing the matter to the attention of the public.

Canadian Regulations for Marking Imported Goods with Name of Country of Origin

Also, the Law in Other Countries

ON November 5, the Department of Customs and Excise issued revised regulations with regard to the marking of imported goods with the name of country of origin.

The principal changes shown by the amended regulations, as compared with the original regulations, are as follows:—

Paragraph 20 is a new provision;

Paragraph 16 and 17 represent changes;

Provisions of Section 18 are more definite.

There is also appended an additional regulation with regard to the marking of containers.

It should be noted that the time is drawing near when the Act comes into force—1st January, 1922. Therefore, members are respectfully urged to study the regulations in order to ascertain how they affect their business.

The Department of Customs and Excise is endeavouring to frame the rulings governing the administration of this Act so as to cause the least possible inconvenience while enforcing the Act.

Regulations

1. This law applies to "all goods imported into Canada" and consequently includes goods originating in the United Kingdom, British Colonies and British Possessions.

2. The country of origin of a manufactured article may be the country in which the article has been finished by a substantial amount of labour amounting to not less than one-fourth the cost of production of such article in condition imported.

3. Goods entered for immediate exportation or in transit through Canada are not required to be marked.

4. When imported goods are found to be not legally marked, the Appraiser will note the fact on the invoice and the additional duty shall be levied accordingly.

5. The Appraiser will report all articles (and packages as hereinafter provided for) not properly marked to the Collector who will notify the importer to redeliver the unexamined packages or to arrange to mark the same and their contents under Customs supervision.

6. The importer may be permitted to mark examined packages and their contents in Customs warehouses, or arrange for the marking of same under Customs supervision on the premises of importer.

7. Whether the marking found on goods in condition imported is as nearly indelible and permanent as the nature of the goods will permit is a question of fact to be determined in each instance by the Collector, subject to the decision of the Commissioner of Customs and Excise.

8. If the importer fails to mark goods when called upon to so do by the Collector, the Collector may require the same to be exported and in default thereof, the goods shall be treated as unclaimed dating from time of importation, and if sold, must be sold on condition that they be marked by the purchaser under Customs supervision.

9. Goods not susceptible of permanent marking may be stamped or labelled for purpose of delivery.

It will be found that while certain kinds of goods, as for example, chinaware and porcelain are capable of being permanently and indelibly marked in the process of manu-

facture, it is commercially impracticable to so mark them afterwards.

Goods of this class, if not so indelibly marked in condition imported, will be subject to the additional duty as provided, but may be released upon being marked by the importer in a manner as nearly permanent and indelible as the nature of the article will permit, as for example, by gummed labels or rubber stamp.

10. Where articles themselves incapable of being marked without injury are imported in bands, wrappers or containers, or on cores or spools, such bands, wrappers, containers, cores or spools shall be marked so as to indicate the country of origin.

11. Imported containers or wrappers intended to be filled with or used upon domestic products are to be marked as required by the Act, but in order to avoid the possibility of origin other than Canadian being imputed to domestic products sold in such imported containers or wrappers because of the marking of the latter, the words "Container (or wrapper) made in " shall be used.

It will not constitute a non-compliance with the Act, however, so as to involve the levy of the additional duty, if the word "Container" or "Wrapper" as provided in the preceding paragraph be not used in the marking of the goods as imported, but, before release from Customs, this additional marking will require to be done.

12. The name of the country of origin is required to be the English or French name of such country. Hence for example, the use of the word "Nippon," which is the Japanese word, the English equivalent of which is "Japan," will not constitute a legal indication of country of origin on Japanese merchandise.

13. The name of a city, province, state, department or other division of a country of origin will not be regarded as an indication of country of origin as required by the Act.

For example "Made in Saxony" will not be accepted as a compliance with the Act, Saxony being a part of the country known as "Germany," nor will "Made in Massachusetts" be sufficient, that being one of the States of the country known as the "United States of America."

"Made in U.S.A." will be accepted as a sufficient indication of the "United States of America" as country of origin.

"Made in England," "Made in Scotland" or "Made in Ireland" will, notwithstanding the above general regulations, be accepted as sufficient indication of "The United Kingdom of Great Britain and Ireland" as country of origin.

14. Fabric gloves are in the opinion of the Department capable of being marked without injury either by stamping or by means of gummed labels on the inside of the wrist, where the brand or trade mark usually appears.

15. Hosiery may be so marked upon the foot where the brand or trade mark usually appears.

16. (a) Cloth and material in the web or roll shall be marked with an indication of the country of origin on one end of each web or roll and on the piece ticket.

(b) Carpets shall be marked with an indication of the country of origin by means of a protruding ticket attached to the edge of each roll at the centre.

(c) Linoleums and oilcloths shall be marked with an indication of the country of origin

on one end of each roll, either by stamping, stencilling or adhesive label.

17. (a) With respect to watch dials and watch movements imported attached as one article, it will be deemed to be sufficient compliance with the regulations if the required indication of the country of origin appears on the movement only.

(b) With respect to watches imported complete, it will be deemed to be sufficient compliance with the regulations if the movement and the case are each separately marked with the required indication of the country of origin.

(c) Watch movements 0 size (one and one-twelfth inches), or smaller, when marked "Swiss Made" or "U.S.A. Made" will be held to comply with the regulations, but when larger than 0 size to be marked in accordance with the provisions of the regulations, as, for example, "Made in Switzerland" or "Made in U.S.A."

(d) Watches and watch movements bona-fide ordered prior to October 1, 1921, may be admitted marked as formerly, without regard to this law or the regulations thereunder, provided they are imported previous to July 1, 1922.

(e) The cases, dials and movements of clocks, whether or not assembled or attached, shall separately have country of origin cut, engraved, diesunk, painted or printed thereon conspicuously and indelibly. This marking may be on inside of the case, the face of the dial and the plate of the movement.

18. The following goods will not be required to be marked with the indication of country of origin, viz:—

I. Metallic goods which are not intended for sale to the consumer in the condition imported but which are merely raw material for use in the manufacture of articles in Canada; crude rubber, crude clay, hides and skins, raw furs, corkwood, unmanufactured marble and stone in the rough, broom corn and bristles, fibre, rags.

II. (a) Partly manufactured materials to be further manufactured or finished in Canada before passing to the consumer.

(b) Completely manufactured parts for incorporation into articles of Canadian manufacture before passing into use by a consumer.

(c) Provided that there shall be incurred in Canada at least 25 per cent. of the total cost of production of the article going into consumption in Canada into the manufacture or construction of which such partly manufactured materials or completely manufactured parts shall have entered.

(d) Partly or completely manufactured parts for use as repairs to articles made in Canada or imported and already indelibly marked with other country of origin.

And provided that on every entry at Customs of goods as described in this Section a statement shall be placed by the importer certifying to facts sufficient to classify the importation within the provisions of this section.

19. The statute requires that the country of origin be indicated in the marking. Hence the word "made," "produced," or "grown" may be used in the marking to suit the circumstances.

20. Goods bona fide ordered prior to the 1st October, 1921, shall not be subject to the additional duty of 10 per centum ad valorem to be levied on the value for duty purposes, provided such goods are imported

into Canada prior to the 1st July, 1922, but such goods shall not be released from Customs possession until they have been marked, stamped, branded or labelled with an indication of the country of origin as required by the provisions of the Act, under Customs supervision at the expense of the importer.

Additional rulings and regulations issued from time to time by the Department will be communicated to Collectors by circular.

Additional Regulation

The following additional regulation was issued by the Department of Customs and Excise on November 11, 1921.

"Provided that containers imported to be filled with Canadian produce and exported may be admitted without being marked with the country of origin conditional on the importer certifying on the face of the entry for consumption that such containers are for use in the preparation of goods for exportation."

Not Peculiar to Canada

It should be remembered that the marking act adopted last session of Parliament is not an original provision peculiar to Canada.

The fact is that the Canadian law in effect is identical with the general marking act of the United States which has been in operation a great many years. Indeed the marking act of the United States is amplified by further, separate and very strict provisions which are incorporated in various tariff items, as for example those dealing with the importation of knives and other cutlery, and with watches and clocks.

One of our members got several thousands of dollars worth of orders in the United States for Christmas cards of Canadian manufacture. The first shipment on account of these orders was forwarded through Buffalo a few weeks ago. The packages were marked "Made-in-Canada," but the Buffalo Customs held the goods on the ground that each card should be so marked, and after appeal to Washington the Washington authorities ruled that the marking on each card was necessary, with the result that they had all to be returned to Canada.

The French law is equally stringent, as is evidenced by the following letter recently received from a prominent packing house:—

"Would you kindly make a memorandum

and take any necessary action in the interests of the Canadian Packers, to arrange for some reciprocity with France with regard to the labeling of canned vegetables and canned fruits for export to France. The French law is such, that unless the goods are packed especially for France, they cannot be entered. We quote extract as follows from our French Agent:—

"The law for canned fish and vegetables, makes it an absolute necessity that tins should be stamped of country of origin, and any clients who would try to import goods not stamped would see them confiscated by the Custom authorities upon arrival. A printed label showing the words "Canada" would not be sufficient and as you have finished packing for this season, this business will also be impossible this year."

"This means that the words 'Canada' or 'Made in Canada' must be stamped on every tin with a die, that is, so that the words are embedded in the tins. Now this can only be done before the cans are packed and when the cans are being made.

(Continued on Page 75)

Performing a Service in Overseas Markets

THAT *Industrial Canada* is read and appreciated by the importers of New Zealand, Australia, Japan, the British West Indies and other countries buying goods from Canada is clearly attested by the contents of letters of acknowledgment received since the publication of the Annual Convention Number in July.

It has been the custom to mail several hundred extra copies of special editions to a select list of the leading importing houses in various countries with a view to furthering the interests of the Canadian export trade. Many recipients of the numbers, of course, do not bother about making acknowledgment but there are always some who do so.

The fact that so many have written letters of appreciation since the July issue appeared and have evinced so keen an interest in trade with Canada, speaks volumes for the service which such a publication as *Industrial Canada* can render to Canadian manufacturers and particularly those whose announcements in the advertising pages give their products special prominence. If, as we believe, these special editions,—the Canadian Products Annual Review Number in January and the Annual Convention Number in July,—are retained for reference purposes, it is surely well worth the while of any manufacturer who is cultivating export business to be represented regularly in their pages.

From a sheaf of the letters mentioned, we extract the following pertinent sentences:—

L. D. Nathan & Co., Ltd., Auckland, New Zealand:—"The publication is an extraordinarily effective one and its circulation should prove of very great benefit to its promoters."

Smith & Caughey, Ltd., importers and warehousemen, Auckland, New Zealand:—"We desire to compliment your Association on such an excellent production. We trust that same will further advance trade within the Empire."

Galofre & Company, importers and exporters, Barranquilla, Colombia:—"We have not yet received 'Industrial Canada,' but we hope to receive same and shall devote special attention to it, trusting to find some lines of goods which will interest us."

L. Latour & Co., provision and commission merchants, Port-of-Spain, Trinidad, B. W. I.:—"We hope to write some of your advertisers and if at any time we require any Canadian products we shall communicate with your Association."

R. W. Thurlow & Co., Ltd., Brisbane, Australia:—"This is a very fine publication and is of great interest to us."

E.W. Mills & Co., Limited, hardware, metals and machinery merchants, Wellington, New Zealand:—"We are very pleased to receive this publication and have studied its contents with considerable interest. We are always willing to do business with Canadian manufacturers and have been importing from some of the leading firms for a number of years."

Camacho, Roldan & Tamayo, Bogota, Colombia:—"We have not yet received this number but trust that it will arrive at any moment; on receipt of same we will read it carefully."

R. C. Bishop, general manager, Christchurch Gas, Coal & Coke Co., Limited, Christchurch, New Zealand:—"I have to thank you for copy of the Annual Convention Number of 'Industrial Canada.' This I have gone through with great interest."

Ataka & Co., Ltd., Osaka, Japan:—"Please accept our best thanks."

Stewart Timber, Glass & Hardware Co., Limited, Wellington, New Zealand:—"We hope we will find this (Convention Number) useful for reference purposes."

Auckland City Tramways, Auckland, New Zealand:—"I have to state that your publication has been perused with interest."—J. J. Walklate, general manager.

H. D. Robertson & Polson, Ltd., mercantile brokers and commission agents, Auckland, New Zealand:—"We find it of interest and hope to find it useful."

N. Z. Farmers Co-operative Association of Canterbury, Ltd., Christchurch, New Zealand:—"The information has been noted and, if occasion arises, we shall communicate further with you."

Jardine Matheson & Co., Limited, Shanghai, China:—"We have perused its pages with interest and trust we may establish business connections in the near future with the firms advertising therein."

McLean Bros. E. Rigg Ltd., wholesale hardware and machinery merchants, Perth, West Australia:—"We thank you for copy of *Industrial Canada* and, when requiring information of Canadian products, shall be glad to avail ourselves of your kind offer."

Cowell Bros. & Coy., Limited, timber and iron merchants, Norwood, South Australia:—"We congratulate you upon the splendid book that you have published, and which we have passed on to our hardware department. Should there be any matter in which we would like your assistance, we would be pleased to communicate with you or the manufacturers direct."

How the Parcel Post may be used Effectively in the Development of Export Trade*

By F. L. FREUDMAN

Sterling Rubber Co., Limited, Guelph

WHILE I have been asked to discuss at this meeting the subject of parcel post deliveries, I believe it would be of considerable interest to most members of the Club to learn how our company got to the point where we had to consider the matter of delivery by parcel post. In other words, there is usually a very great deal of missionary work in the way of correspondence to be done and satisfactory arrangements made before the orders can be secured and before the necessity arises for the consideration of parcel post delivery. I would like, therefore, to outline in a general way some of our experience in getting started in the foreign market with our products.

The Sterling Rubber Company manufacture only seamless rubber goods which are, of necessity, very light in weight and they can easily be sent by parcel post. About half our deliveries within Canada and every foreign shipment we have made in the last four or five years have been by parcel post. It may be that there are few concerns whose products are so well adapted to shipment by this method but, undoubtedly, there are hundreds of articles manufactured in Canada today which can readily be packed and shipped by this method. Almost any article which, in its standard package, does not weigh over eight or nine pounds can be packed for safe transportation by parcel post and come within the limit of weight of eleven pounds per package according to the parcel post regulations.

Followed up Inquiries

When we first started out after our foreign business, we took advantage of the facilities offered by the Department of Trade and Commerce and made it a point to read carefully the bulletin issued by the Department and especially the trade inquiries for products of our manufacture. Practically every one of these bulletins contained a large number of inquiries for products produced in Canada and, where ever our line of goods were inquired for, we made it a point to write to the Department for the name and address of the party making the inquiry. We also wrote to the various trade commissioners with catalogues and pamphlets illustrating our products and in this way enlisted the help of the Commissioner in securing first a good first-class agent through whom to solicit orders in the market we were developing. After securing our representative, we usually made an arrangement to pay him a certain commission on all orders sent into his territory, ranging from 5% to 10% according to the cost of securing orders and the volume of business to be done. We have always quoted prices to the agent which he in turn could quote to his customers and on which we would allow the commission to the agent. We have always quoted prices f.o.b. our factory and given our customers full information as to the exact cost of postage and insurance so that the laid-down price could easily be figured by the customer. We have always made it a point to give full data regarding our products and method of packing as well as cost of postage in every quotation to our customers as well as our agent since we have found that close atten-

One of the primary purposes of the Export Clubs which have recently come into existence in various Canadian industrial centres is to provide an interchange of experiences in the handling of export trade problems. The accompanying article furnishes a good illustration of how this purpose is being carried out. Here we are given the practical experience of a company, manufacturing rubber goods, in the cultivation of foreign business through the medium of the parcel post. This is the very best type of information. It is not theoretical or speculative but the actual experience of a company which has tried the experiment and found it workable and satisfactory. We have no doubt that other manufacturers will find suggestive material in this article.

—THE EDITOR

tion to small details is very much appreciated by the foreign buyer.

Method of Operation

After securing orders through our agent, we forward the goods direct to the customer by parcel post, obtaining from the Post Office receipt for the shipment covering whatever number of packages the shipment might contain. We then make our invoice direct to the customer, adding to the goods the exact cost of postage and insurance and sending with the invoice the parcel post receipt and also the insurance certificate covering the shipment. We then make sight draft on the customer which is turned over to our bank and forwarded to the customer's bank in the usual way. As a rule, the parcel post shipment will arrive at about the same time as the draft and, with very few exceptions, we have been able to secure returns from our drafts without unreasonable delay. After we have secured payment for the goods, we credit our agent with his commission on the transaction. In this way, the agent knows that unless we receive payment he does not receive commission and this has been found to help considerably in keeping away from doubtful accounts. We have been able to work this plan successfully in every British Dominion as well as in Europe and the South American countries.

Standardizing Parcels

When we first started making regular deliveries by parcel post, we found that it was necessary to work out a standard size package such as would come within the regulations of the Post Office Department. The great problem was to secure a package which would be able to stand considerable rough handling and at the same time, be light in weight. One of the handicaps a Canadian shipper has to contend with is the rule that parcel post packages must be left open for inspection. However, we have been able to design a box which meets all the regulations of the Department and, at the same time prevents as much as possible the chance of the goods being stolen from the

package. The package we have adopted will average between nine and eleven pounds in gross weight when ready for shipment and the weight of the package itself is approximately one pound, ten ounces, so that there is very little additional cost in postage on account of the weight of the container. Every package with its contents is carefully weighed before the contents are packed in it in order to be sure not to run over the limit of weight. The boxes are then assembled and we have found that it pays to rope the package well before shipping. We make it a point also to place the address of our customer on one side, using a regular printed address label, and we also address the three side of the package with an ordinary marking crayon, giving full particulars as to the case number, gross and net weight of the case and contents, and the total number of cases in the shipment. We have found that it pays well to watch details such as this and during the past few years we have had very few complaints about our goods arriving in bad condition or with part of the contents lost or stolen.

There is one suggestion I would like to make which I believe would greatly facilitate shipments from Canada to various other Dominions and that is that parcel post deliveries should be carried on all the Canadian Government Merchant Marine vessels. There are at the present time a good many sailings to various Dominions where parcel post deliveries could be carried direct in much quicker time than over the present route. Furthermore, in the case of shipments from Vancouver to Australia and New Zealand, there are usually several sailings per month of the Merchant Marine whereas there is an average of only one sailing per month of the regular mail steamer. If shipments could be made on any Merchant Marine vessel, it would undoubtedly mean quicker deliveries and better service to the foreign trade.

Direct Shipments

I understand that negotiations are now being made for shipment of packages direct from Canada to Cuba. These shipments must now be sent via England and France, meaning a delay of at least two or three weeks in effecting delivery whereas, if shipment could be made direct from Montreal or Halifax, delivery could be effected within a week or ten days. There is an excellent market in Cuba for a great many Canadian products but our experience has been that, owing to the long delay in getting shipments to our customers, we are losing out with this trade to our United States competitors.

Another great help to Canadian parcel post shippers would be a C.O.D. collection system, such as is used in England and the United States where shippers can forward shipments C.O.D. by parcel post, the same as via express. This would be a very great convenience in Canada as well as in foreign countries and it should not be impossible to work out an agreement of this kind with all of the countries in the present Postal Union since it is now being done by both the British and United States Governments.

* Address delivered before Canadian Export Club of Toronto

European Problems and their Relation to Business on this side of the Atlantic

REPORT OF SPECIAL COMMITTEE OF U. S. CHAMBER OF COMMERCE

THERE is evidence on every hand that the world is now operating on a basis of less than half of the pre-war standard, although a few industries are enjoying full or nearly full activity in some countries.

There are no dependable figures to measure the great decline in consumption, but European economists whose opinions are highly regarded declare that the consumption of three hundred million people has been reduced, on the average, to almost thirty per cent of what it was previous to the war.

There is a great need of raw materials, food, clothing and all kinds of manufactured products. Millions of people want the commodities which others could supply. They are unable to buy because their money is so reduced in value that it has little buying power. Every purchase at the present high rates of exchange means payment at a price which is nearly prohibitive. This generally means the issue of more paper money and consequent further contraction of the already limited buying power.

Exchange must be Stabilized

Improvement of the situation and the restoration of buying power is not dependent entirely on the extension of credit by the countries wishing to sell. A certain amount of long time credit may be utilized with safety. In general, however, a buyer in a country whose currency has seriously depreciated cannot make purchases in the United States, and promise payment in dollars six months or a year hence, because it is wholly impossible to estimate what must be paid for those dollars when payment is due. Such a purchaser can assume the risk only when there is reasonable stability in the exchange of his country and conditions are such that he may have confidence in the future.

The currencies of the countries affected cannot be very much improved or the exchange situation placed on a more dependable basis without aid in the form of loans which will strengthen the governments' fiscal positions and permit them to stop the issue of further paper money.

The credit and capital of the stronger nations, however, cannot be employed in amounts sufficient to overcome the present crisis without assurance of settled conditions.

In every country your Committee found unanimous agreement that confidence does not exist because peace is not established, although nearly three years have elapsed since the Armistice.

While marked progress has been made and there has been a surprising degree of improvement in some directions even in the last year, it is apparent that business in Europe has come to a definite pause, and is not likely to resume the movement forward until the armed conflicts which still persist there are stopped and the menace of recurring warfare is removed.

Among the bankers and business men of every country visited, it is the general belief that the establishment of peace and restoration of confidence are impossible without the whole-hearted cooperation of all allied, neutral and former enemy countries.

Payment of the German Reparations

The problem involved in the payment of Reparations is one in which the United States, in common with all other important commercial nations, is greatly concerned.

As the United States has already declared,

The accompanying article contains extracts from a report prepared by a committee appointed by the Chamber of Commerce of the United States to visit continental Europe for the purpose of observing conditions. Members of the committee participated in the meetings of the International Chamber of Commerce held in London in June and there came in contact with business men and bankers from twenty countries. Subsequently the committee visited Germany, Czechoslovakia, Austria and France and held conferences with government leaders, bankers, merchants, manufacturers, economists and representatives of labor. Their report therefore constitutes a valuable contribution to the business literature of the day.

—THE EDITOR

we believe that Germany should make good, to the utmost limit of her ability, the damage she has wrought. Certainly, the world could not acquiesce in a situation by which the nation which was the primary cause of so much suffering would escape the consequences of her aggression by paying a small part of the cost, while the greater portion is left as a burden upon the peoples she attacked.

It is inevitable that the people of Germany must accept the penalty and must endure privations for some years, in order to repair so far as they may the injury caused by the madness of the government they supported. There is evidence that many of the German people believe that she must pay to the full extent of her ability, for the damage done, and realize they must, through hard work, contribute their share. It seems clear that the present government and its supporters are conscientiously trying to solve the problem and meet the required payments.

Object to Payment

There is, however, an unfortunately large number of men representing industrial and financial interests who, believing that the bulk of these payments must come out of them, refuse to regard the settlement arrived at as final. They are strongly opposed to the payment of the sums fixed, insist upon the inability of Germany to pay, and campaign persistently against government leaders and all others in Germany who contend that the indemnity or anything like it must be paid. They are supported by the Monarchists and the Militarists, and while these groups are in the minority, they are powerful influences. If they should secure political ascendancy, even temporarily and attempt to repudiate or evade the Reparations settlement, it is inevitable that a crisis will develop which will be a further menace to peace. The danger of such an occurrence requires that the United States and Allied Nations shall at all times present a solid front, and thus carry conviction that escape from reasonable demands will not be permitted. Unless these nations thus act in concert, France will be impelled, in self-defence, to use military pressure, as she has in the past.

Your Committee feels unable to express an opinion as to whether Germany can pay the amount of the indemnity fixed. It believes that only experience will demonstrate Germany's ability in this respect, and this must depend in a large degree upon the promptness with which the normal business of the world is restored, upon Germany's

success in securing outside financial assistance and her capacity to put her fiscal affairs in order.

While there may be many differences of view as to the power of Germany to meet the indemnity, we have the opinion of some of the best of the German leaders that it can be paid and will be paid, if Germany is given a reasonable chance.

The terms of the Reparations settlement are sufficiently elastic to permit of giving Germany full consideration in the event of difficulties, provided she sincerely tries to meet her obligations.

It is essential that Germany shall have a fair chance to produce and distribute, if she is to meet the necessary payments, and it is in the interest of all of the countries,—Germany in common with the others,—that the payment of the Reparations be so financed as to cause the minimum of dislocation of world commerce.

Commission Lacks Powers

Your Committee questions whether the Reparations Commission, on which it believes the United States should be represented, has sufficiently broad powers to meet the situation. The Commission was organized to fix the indemnity and enforce its payment. The effect of such payments on international trade and finance was not realized sufficiently when the Commission was constituted.

Loans between the governments, in connection with reconstruction, seem no longer feasible. Therefore, financing in connection with Reparation bonds and payments becomes the problem of private business. Your Committee is of the opinion that an organization representative of the financial and business interests of the leading countries should be constituted to work continuously with the Reparations Commission in dealing with this and other great financial problems which must be met during the next ten years.

In the absence of international machinery designed to meet this need, and functioning with general support, business uncertainty will continue and it will remain impossible for bankers or business men to plan intelligently for the future.

On no country is the present foreign exchange situation reacting more harmfully than the United States, and none is more concerned in efforts to improve it and to deal with the problems involved in the Reparation payments.

Guarantees of Security

The conditions existing between France and Germany dominate the European situation. Similar conditions in Central Europe are of nearly equal importance. In Western Europe the French fear of future military aggression by a rehabilitated and revived Germany influences the whole problem.

There is practically no dissent in any of the European countries, among those who have given the subject most thought, from the belief that if Germany pays the indemnity fixed, or anything like it, she must again show great industrial strength, even greater than before the war. Her metallurgical plants and chemical industries must be developed further. Such a Germany with a population of over sixty million people will likewise be potentially a great military power.

The speed with which countries having large industries may be turned to the pro-

duction of war material, and the almost unlimited possibilities of the chemical industry as a factor in modern warfare have been fully demonstrated.

It is pointed out that Germany has millions of soldiers who have returned to civil life. She has a larger number of trained fighting men than any other country. In the process of disarming Germany, since the signature of the treaty, great difficulty has been encountered in securing delivery of her arms and ammunition.

It is argued that the promptness with which Germany is able to place men in the field is demonstrated by the fact that, during the recent controversy respecting Upper Silesia, a force of more than fifty thousand men was assembled from nowhere in two weeks, fully equipped with machine guns, heavy artillery and airplanes.

Twice in fifty years France has been overrun by the German armies. The last war resulted in damage which Germany cannot make good and an appalling sacrifice of life.

Being now in a position to take measures for her own protection, France, with her population of thirty-eight million people, compared with her neighbor of over sixty million, does not propose to take chances on the future.

France must be Paid

Either Germany must pay to France a substantial part of the damage she has caused, or France is economically crippled for generations. France intends that Germany shall pay. If France cannot at the same time, by some sound agreement among the nations, be assured against another German outbreak, French sentiment will strongly oppose retirement from the banks of the Rhine and will be tempted to encourage and promote the division of the separate states which now make up Germany.

France, in common with some of Germany's other neighbors, does not consider that there is a sound reason in the interest of humanity, why the present German Republic should continue, when states within its borders do not value such solidarity. There is a strong opinion in countries bordering Germany that it would make for continuous peace in the world if Germany should be broken up and rendered impotent for military action in the future.

Among those who hold this view the conviction exists that the great nations of the world will be unable to get together for the firm establishment of peace and the assurance of security which France and some of the other European nations feel they must have for the future.

The earnest apprehension which exists in France concerning the danger of a restored Germany is apparent in every political group and among all classes of citizens. Similar fear exists in Poland and Czechoslovakia.

Believing there is yet no peace, but instead, recurring minor conflicts and constant danger of the resumption of large operations, France consequently feels obliged to carry an army of seven hundred and fifty thousand men. Czechoslovakia, with only fourteen million inhabitants, has a standing army of one hundred and fifty thousand men. (On a corresponding basis, the United States would have an army of nearly one million two hundred thousand.) It is estimated that Poland has under arms two hundred thousand soldiers. Hungary, Roumania and Yugoslavia all have large armies. This military activity is in addition to that in South-eastern Europe where war between the Greeks and Turks still continues.

While the attainment of real peace in Central Europe, and in turn in Russia, presents a great problem which must soon be solved if serious economic difficulties are to be overcome, there is no escape from the

fact that the relation of the restoration of Germany to peace in Europe and security for France, and Germany's neighbors, is the question which must be met first.

Assurance of Security

The mines, industries and lands of northern France must be restored before that country can enjoy real prosperity. The enormous plants and the great skill of the industrial Germany which did business throughout the world before the war must also be utilized fully before commerce between the nations can resume its normal development. It does not seem possible for either to occur, however, unless there is peace and some promise that military aggression by Germany or any other important state will be prevented in future so far as such prevention is humanly possible.

It is essential to Germany, in her own interests, that some plan shall be devised by which France and other European countries shall be given assurance of security in the future. Some of the most important leaders in Germany frankly declare that France should have such assurance. They were unable to suggest any acceptable guarantee which Germany herself could offer, but they expressed the hope that the other countries might soon agree upon some method of meeting the situation. German leaders believe that otherwise they must live and work for years in a state of constant friction with France and the ever-present possibility of French armies occupying more territory whenever difficulties arise.

The cost of the Armies of Occupation represents a large sum of money which, under the Treaty, Germany must pay in addition to indemnities. If this expense could be cut off or reduced to a minimum, it would help Germany greatly in making payment. It would render outside financial aid to Germany much easier than under present conditions. It would likewise be of assistance to France, since it would restore to productive effort thousands of her young men now in her army whose employment as a police force represents an enormous burden and is a drag on the whole world. The possible removal of this burden, however, depends upon some effective plan for the maintenance of peace, on which the nations shall unite.

The German Situation

As indicated, peace is as necessary to the economic restoration of Germany and the development of her power to pay proper indemnities as it is requisite to the recovery of France and her relief from intolerable military expenditures. Germany cannot pay unless she produces at her full capacity and has opportunity to sell. She cannot so produce without raw materials greatly in excess of the quantity she now obtains. It is practically impossible for her to procure the requisite raw materials, a large portion of which she must import from other countries where the exchange is against her by a wide margin, unless she can obtain credit and her government fiscal system is placed on a very much better basis than at present.

Greater financial aid will not be extended to Germany by other countries in the measure necessary unless she can pursue her rehabilitation in peace and there is confidence that a secure central government will be maintained within the German Republic. If there is the constant possibility of breakdown and dismemberment of that state, it is next to impossible for Germany adequately to be financed.

German industries are at present operating on a basis of about one-half capacity. Some are working one hundred per cent and more, but the number whose operations are reduced is such as to bring the average down.

There is, of course, considerable unemployment, but not enough under present conditions, and especially during the summer, to constitute a social and political menace. The number of men out of work seems small compared with the United States and England, but this is accounted for by the fact that in many industries there is a scheme of part-time employment and a shift system is enforced. In some lines the number of excess employees is very large. To handle greatly reduced traffic, the railways which are operated by the government carry three and one-half times the number of employees used before the war. In other government services the ratio is reported as four to one compared with the prewar period. The explanation made for this condition is that most of the men are demobilized soldiers and that if they were not employed in some way they would have to be maintained in idleness by the government.

The wages of German workers measured in dollars are very low. It is a great mistake however, from the domestic standpoint, to consider wages in any European country with depreciated currency, except on the basis of its own money.

Wages in Germany

German workers are being paid very high wages in marks and they still regard this paper money with much of the respect they had for the old mark. Many of them fondly look forward to the time when the mark will be rated at its prewar value while they will continue to receive almost as many marks as they do now.

While operating within her own boundaries on the basis of paper marks and selling abroad in gold gives Germany some advantage in export trade, the great reduction in wages which must come when the mark rises substantially in value will bring to Germany many difficulties.

The wages paid German workers at present, even on the paper basis, are sufficient to give them a fair standard of living, although very much lower than they enjoyed before the war. During the war, and immediately afterward, the German standard represented but the bare means for maintaining life. Indeed, at times it was close to starvation. The contrast of present conditions, when the workers are able to get a reasonable amount of food, is such that they are fairly well satisfied. Their condition is so much better than that of the middle classes,—salaried employees and those dependent upon pensions or an income from savings or inheritance,—that the workers consider themselves fortunate. It is probable, therefore, that for some time to come German labor is likely to be satisfied with what appears to the outside world to be an amazingly low wage and standard of living. At present the wages in Germany permit her to produce the goods she manufactures at very low costs and to sell in the markets of the world on a basis with which few countries can compete.

This condition must change as Germany extends her foreign trade. The more she sells abroad for dollars, the more her mark must appreciate in value and her prices on the dollar basis increase.

Again, it is contended by those who have studied the situation closely, that when the new taxes become effective before the end of this year, taxes which are largely necessary to meet the indemnity, manufacturing costs must rise and the great disparity in prices which the Germans can offer in competition with other countries will be reduced.

Meanwhile the cost of living continues high in Germany,—in July prices were higher than at any time in a year,—and this may be expected to increase wage costs still further in many directions.

If the German government is not soon able to secure the financial aid necessary to strengthen her monetary system, her progress toward larger operations must be slow and the purchases of raw materials from other countries must continue to be in small quantities. This process will affect her ability to pay indemnities and inevitably carry the threat of recurring crises, with political possibilities which cannot be forecast. At the same time, if large unemployment should occur during a severe winter, internal social disturbances can hardly be avoided.

Must Rebuild Foreign Trade

Germany must rebuild her foreign trade to pay the Reparations. This is necessary quite aside from payments to France in the form of building materials, machinery, and other commodities for the restoration of the devastated regions.

France fully realizes today the need of receiving a substantial part of the payment due her in the form of goods, and, notwithstanding reports to the contrary, your Committee is convinced that the French people now understand the practical common sense of this method of payment and largely are reconciled to it. It is true that some interests in France fear the effect on their own business of payment in kind by Germany; nevertheless the demand by the people of northern France that the devastated regions shall be restored without delay is quite evident and cannot be repressed.

At present, along the Rhine, the Allies are requiring licenses for and imposing customs duties on all business passing into or out of the occupied area. These penalties were exacted last Spring when Germany failed to pay obligations due under the Reparations decision. The customs collected are paid to the Reparations Commission and credited against German indemnity.

Since Germany has now agreed to the Reparations settlement there seems no longer adequate reason for the continuance of these sanctions. The system, as operated, presents the objections of troublesome interference, restriction of German ability to work and pay and likewise a waste of money because of the unnecessary employment of many officials. The operation of these sanctions is the cause of almost daily trouble, which serves to over-emphasize the strained relations between the German people and the French.

Sanctions on the Rhine

At the meeting of the Supreme Council held in Paris in August it was agreed, at the suggestion of France, that steps should be taken for the early abandonment of the present sanctions on the Rhine, and it is therefore to be hoped that this troublesome matter will be settled before the end of the year.

Your Committee is convinced that France, notwithstanding assertions to the contrary, is anxious to remove every possibility of future trouble, but the problem always resolves itself into the need of positive assurance against another attack and of payment by Germany for the damage she has wrought.

Other European countries which normally represent a large demand for goods may resume the process of rebuilding and may gradually develop trade, but until the situation which now afflicts France and Germany is cured, improvements in other directions are of no great avail.

Russia, for example, may soon be reopened and reconstruction commenced there. In that event, there will be a considerable demand on other countries for raw materials and manufactured products, but the best information available indicates that Russia's recovery will be slow. The breakdown of the Russian transportation system is such that

a long time will be required before facilities are available in Russia for the movement into that country of necessary supplies or the exportation of Russian commodities in exchange. Moreover, serious as the risks are in the more stable countries of Central Europe and in Germany, in undertaking financial and business enterprises, they are infinitely greater in Russia.

The capital and credit of other countries are not likely to be placed at the disposal of Russia until there is evidence of protection and safety.

If Russia could be restored promptly to production it would aid in the recovery of Germany, but this alone would not give stability to German conditions.

Central Europe and Czechoslovakia

The conditions of uncertainty and insecurity in the more important countries of Central Europe are still bad.

Your Committee was unable to visit Poland, but accurate information as to the situation there is available in every European capital.

In the United States, remote from the scene, it is difficult to realize the far-reaching effect of the conflict over the division of Upper Silesia, as well as the fear of Russia and Germany which exists in Poland.

Polish currency is greatly depreciated. The country is struggling to maintain an army of abnormal size. Her internal political condition is precarious and she is constantly engaged in quarrels with her neighbors over trade relations with them. Between Poland and the other states of Central Europe, as well as between these separate states themselves, there is a condition of confusion about transportation, tariffs, and embargoes at frontiers, which constitutes a serious bar to free commerce and holds back the reconstruction of the countries affected.

This situation is due to the same lack of confidence that exists in Western Europe, the fear of more war and inability to reform the government financial systems of the countries involved.

The settlement of the Upper Silesian problem should bring considerable relief, but this represents only one feature of the situation. There are scores of lesser adjustments which are essential before these countries can trade with each other efficiently and live together as peaceful neighbors.

With fertile fields and large and efficient industries, Czechoslovakia is easily one of the most promising states of Central Europe. Nearly seventy per cent of all the industry of the old Austrian Empire is within the boundaries of Czechoslovakia, and most of the coal and raw materials produced in the former Empire are located in the new Czech State. The fourteen million people of this country are energetic, ambitious, intelligent and enterprising. They are showing commendable capacity for self-government, but the country is nevertheless confronted with many difficulties.

The manufacturing power of Czechoslovakia is such that she can supply the wants of her own people for such goods as she produces by operating her plants to the extent of forty per cent. of her capacity. To enjoy full prosperity, she must export fifty to sixty per cent. of her possible output.

Before the war, the market for the steadily increasing output of Czechoslovakian factories was primarily in the rest of the Dual Monarchy, i. e., Hungary and Austria, where this output was protected from competition by tariffs. She sold the balance of her production largely in Roumania, Jugoslavia, and the adjoining territory. In this area she had the advantage of proximity and the facilities of Vienna as a great centrally located market in which the people of these countries did most of their buying.

Vienna supplied bank facilities, convenient transportation, and a thorough knowledge of the languages, needs and credit standing of buyers throughout this great territory. A large part of the prewar business of Czechoslovakia was transacted through Vienna and the ownership of most of her industries was in Vienna.

With the constitution of the new state and confidence in her new-found strength and power, Czechoslovakia endeavored to transfer the handling of most of this business to her own borders and to center it at Prague. With the disturbed conditions which existed all about her, she left obliged to keep a large part of her coal which formerly went to Austria and Hungary.

With transportation chaotic, she feared to permit her freight or passenger cars to go beyond her borders. Up to the present she has believed it necessary to stop all trains at her frontiers and there transfer goods and passengers to Austrian trains and those of other neighboring countries.

This practice has led to great confusion, delay and loss as well as continued quarrels. The authorities of Czechoslovakia point out, however, that when they attempted to overcome these difficulties by permitting their rolling stock to go into new Austria and other states it seldom returned because of the imperative needs of her neighbors. Such cars as were sent back, whenever an exchange took place, were usually out of repair and less valuable than the railway equipment of Czechoslovakia, which is in fairly good condition. The result of these incidents is a high state of mutual suspicion and a constant tendency toward reprisals.

Questions of Treaties

No definite commercial treaties between the Central European countries have yet been worked out. There are temporary agreements for brief periods, which are a frequent cause of difficulty because of allegations that they are not faithfully kept. It is undoubtedly true that in some instances economic conditions do not permit of their being carried out. One country will agree with another to deliver certain quantities of foodstuffs or raw materials in exchange for commodities of another character from a second state. One of the nations will make deliveries in whole or in part while the other fails to do so. Frequently this failure is due to causes beyond control, but this fact does not help the situation materially.

Austria is undoubtedly more largely the victim of these circumstances than any other country in the group, but they all suffer in a considerable degree. The result is that the business of all of them is far below what it ought to be, and the condition constitutes a grave handicap to their financial and economical recovery.

Czechoslovakia is operating to about forty per cent of her capacity. She has large modern textile plants, for example, which normally purchase cotton in the United States. She could sell substantially all of her cotton and woolen textile output in neighboring states if she could buy the raw material needed and there were such stability as would permit the extension of adequate credit to her customers. Such credit could not be made available without the application of some sound plan of financing which would help the entire area, and the success of such a plan is clearly dependent upon the establishment of peace and tranquility in this section.

These conditions can hardly be secured without the aid and cooperation of the more powerful nations, which should be inclined to help in their own interests, because the territory represents an important market for raw materials and manufactures. These

states not only desire aid of this character, but they are eager that it should be made available soon. They believe that their future largely depends upon it.

The Austrian Problem

Austria is the crux of the Central European problem and the large question it presents practically revolves about Vienna. Here is a city of two million, one of the finest capitals of the world, which was the centre of operations for an Empire of forty million people.

Austria now has within her new borders approximately six and one-half million, practically cut off from free trading relations with her neighbors and no longer the recognized clearing house for their business. A city of the size of Vienna cannot be maintained easily as a going concern by so small a national population. Austria does not raise food enough to live on. She must import coal as well as a large part of the other raw materials she needs. With tariffs and embargoes on every side, the restriction of her business is obvious. Further burdened with thousands of refugees from the east, only charity from the United States and elsewhere has kept her population alive.

In the face of these vicissitudes, her improvement during the past year has been remarkable. The country is now enjoying a certain hectic activity, which is greatly influenced by the low state of her money and the bargains which the country offers to foreign buyers. The contrast of the present scale of living, although low, to that which the country suffered so long is such that her workers are reasonably satisfied.

Communism has disappeared and the present government in spite of its many difficulties is functioning with a considerable degree of satisfaction to its people. All of the rival political parties have joined in support of the present ministry.

The most serious problem the municipality of Vienna has to deal with is that affecting nearly half a million people of the middle classes, formerly government officials, pensioners, small professional people, and tradesmen, as well as those who before the war lived on small incomes from investments. There is no need for the large official group maintained in government departments on a scale necessary to care for the affairs of forty million people. The crown has so depreciated in value that its purchasing power permits these people barely to exist. As in Germany the workers whose wages have increased are far better off than the people of this class.

The workers realize this fact and are fairly content with their lot, although a large number of them are working on a part-time basis. Under laws passed some time ago the industries are not permitted to discharge employees freely. Many of them are carrying an abnormal number of employees. The wage is so low, however, in comparison to that of more fortunate countries, that this expense is not as serious as it might appear to be, and the costs of manufacturing in Austria are low almost beyond comprehension.

Little by little the very small factories employing workers in highly skilled trades are finding themselves and increasing their output. The results of their handiwork are of such artistic value and the prices so low that the foreign demand is good.

Superficially, conditions in Vienna appear to be much better than they really are. It is not until one finds that four hundred thousand children and other dependents are still being fed daily through charity that the real situation becomes apparent.

There is reason to believe that even with its restricted territory Austria can, and will, recover and be able to maintain a life of some promise for its people, if it receives essential aid from outside in strengthening its finances

and restoring its currency. A prerequisite to its future is the establishment of something like prewar relations with its neighbors.

Vienna has many advantages as a trade center for Central Europe and is so placed in relation to the transportation system that it can conduct a substantial part of the business with less expense and greater efficiency than any other nearby center. The countries contiguous to it are at last coming to realize this, and a constructive plan might be carried forward with the aid of the more powerful nations which would promise a satisfactory solution of the problem of Vienna and Austria.

Next to the restoration of peace and cooperation in the western part of the continent, comes the necessity for the establishment of like conditions in Central Europe. One reacts on the other to such an extent that they are almost inseparable.

British Columbia Apples in New York

British Columbia apples are moving to New York in trainloads, three trains having been shipped from Vernon, B.C. during the week of October 17th headed for the most discriminating fruit market on the continent. As soon as the citizens of Gotham dug their teeth into an Okanagan apple this season they demanded more.

This marks a new record in apple shipments in Canada, if not on the Pacific Coast. To have even one train billed for one city is somewhat of an achievement in the apple trade, but when three trains of more than thirty cars each are rolling to the one market, the event becomes of more than local importance. The apples on the three trains are valued at nearly \$60,000.

The original estimate of the Okanagan apple crop which placed car shipments at two million boxes, is considered in authoritative circles too conservative. It is predicted that apple exports will number over 4000 cars of approximately three million boxes.

The total output of the valley for the season including returns from potatoes, vegetables and other fruit crops will return over \$9,000,000, the farmers of that district declare.

Although in previous years Okanagan shippers have sent cars as far east as New York and Eastern Canadian centres, it was not until this season that this trade has reached very large proportions. Car shipments at the United States from the Okanagan this year will number over 300, about 200 of which are destined for the New York market. Not only are good prices being obtained in the Eastern States but the duty charged against Canadian apples is offset by the state of the exchange, which in this case works out to the advantage of the Canadian farmer.

Instead of waiting until the prairie market had absorbed previous shipments, as has been the case in former years, the Okanagan shippers this season sent their stuff to the other side, thus obviating the necessity of glutting their prairie market and at the same time finding a good market for surplus stocks.

Alberta Iron Deposits

The "Last West" published by the Industrial Relations Department of the Canadian Pacific Railway, under date of November 1st, refers to a deposit of 154,000,000 tons of hematite ore which has been discovered on the north shore of Lake Athabasca. Samples of the ore have been assayed 64.36 percent.

ore. While the existence of iron ore in the north country has been known for some years, this particular discovery was made accidentally by E. A. Butterfield and his son Norman, of Edmonton.

Making Electric Ranges

The D. Moore Company, Limited, Hamilton, have added a line of electric ranges to their list of products. These are being offered to the public this winter along with the Sunfire electric grate. Large sales are being secured for the latter, those being adaptable for house, office or store use and finished in statuary bronze and antique brass finishes. The company have also added to and improved their different lines of popular price ranges for this season's trade.

Producing Wrenches

Universal Wrench Co., Windsor, report that they are now in production on three sizes of the Universal Lever adjustable wrench viz. 6, 8 and 10 inches. This tool seems to be meeting with much success as it is different from any wrench ever placed on the market. The company's head factory at Windsor, as well as factories at Jackson, Mich. and Dayton Ohio, have added new equipment for reducing cost of production to a minimum.

Hemp Growing

This year's experiments in growing hemp in Manitoba have demonstrated beyond a doubt that conditions here are eminently suited to the industry. Large crops have been grown at Portage La Prairie, Dauphin and Swan River, and the yield and quality is fully up to the highest expectations of the enterprising gentlemen comprising the Canada Fibre Company, of which Col. William Grassie, Winnipeg is the chief promoter. At Portage La Prairie 200 acres were sown to hemp and yielded 500 tons, which will net the grower \$35 to \$40 per acre. It has also been ascertained that seed of certain varieties of European hemp can be produced, being 30 days earlier than the Kentucky hemp, an important development in this young industry, as the importation of seed is a very expensive item. Col. Grassie is now eliciting the support of financial men for the establishment of factories so that the goods made of hemp fibre can be produced at home instead of exporting the fibre and re-importing it in manufactured form. Government assistance is also expected. According to present plans a retting and spinning factory will be established at Portage La Prairie to prepare the fibre for shipment abroad where there is a keen demand for it.

Display Films

Commendable enterprise has been shown by the Canadian Peerless Jewelry Company of Sherbrooke in arranging for the display in motion picture theatres of a film showing processes of jewelry manufacture. This film was made originally for display at the annual meeting of the Canadian National Jewelers Association but it has since been loaned to retail jewelers throughout the country for use in local theatres. The company have also their own machine for showing the film in churches and other places, and altogether it has received quite a good deal of favorable comment.



The Made in Galt Exposition

Manufacturers unite to give a splendid display of articles made in an industrial centre.

DURING the week of November 12-19 the citizens of Galt, Ontario, had an opportunity to see for themselves some of the many reasons for being proud of their community, an opportunity, it is safe to say, that practically none of them neglected. This was the Made-in-Galt Exposition, staged by the manufacturers of the city for the purpose of displaying those products to which so much of this industrial centre's prosperity is due.

The idea of holding the exhibition came first to Col. A. J. Oliver of the R. McDougall Company, Limited, and T. H. Watson, Canada Machinery Corporation. These gentlemen talked the matter over with their fellow manufacturers and the organization of a committee followed the favourable reception of the plan. Col. Oliver and Mr. Watson were elected president and vice-president respectively, B. H. Neill, Canada Machinery Corporation, secretary and G. A. Dobbie, Stauffer-Dobbie, Limited, treasurer. On the executive committee were H. C. McLaughlin, McCaskey Systems, Limited; R. W. Roelofson, Roelofson Elevator Works; Chas. Turnbull, C. Turnbull Company, Limited; W. A. Fallon, Getty & Scott, Ltd.; George Fisher, Canadian Brass Company, Limited; J. P. Stewart, Sheldons, Limited; J. E. Gardiner, P. W. Gardiner & Son; and A. R. Goldie, Goldie & McCullough Company, Limited; C. A. Webster was appointed manager.

It was decided to hold the exhibition in the curling rink and skating rink, two stone buildings whose size and central location made them particularly suitable for the purpose. The former building was used principally for the exhibits of machinery, metal goods, electrical appliances, etc., while in the latter, textiles, knitted goods, shoes, hats, silkware and other light manufactured articles were displayed.

Space was allotted to the exhibitors at a nominal charge and when the exhibition opened on November 12, sixty-nine manufacturers and the Galt Collegiate Institute were represented by booths containing their products. Coloured bunting, brilliant lights, flags and pennants added to the decorative effect.

Throughout the whole exposition there was a feeling of whole-hearted enthusiasm, not only on the part of the manufacturers, but also from the crowds that kept coming to see it. People were literally amazed at the great variety of goods on view. Even some of the manufacturers had previously

had no idea that so many things were produced in their own city.

The official opening of the fair took place on Saturday night, November 12, when three bands paraded from different quarters to meet at the exhibition entrance where a short concert was given. Following this, S. E. Charlton, mayor of Galt, made a speech, calling attention to the fact that co-operation had made possible the splendid results which were to be seen. The show was then declared open.

The community spirit was strongly in evidence. The visitors felt that this was their own show and they were justly proud of it. All classes of citizens moved through the crowded buildings with full appreciation of the gayety and beauty that met them on every side. In the skating rink a dance was in progress as an added attraction and this was held every night during the week from nine o'clock to midnight.

On the Monday following, the show was thrown open to the school children, who were brought in hundreds by their teachers and went away, happy in the possession of souvenirs, to advertise the exhibition to their parents.

The object of the exhibition was kept before the visitors by streamers with appropriate mottos placed around the walls. "When Buying, See Galt Products First." "Buy Made-in-Galt Products." "Help to keep our Factories Busy." "Made in Canada Means Nothing Better." "Patronize Home Industry." "Keep the Canadian \$ circulating in Canada". These were a few of the reminders to the public that their co-operation was needed to make the industries successful. The familiar black and white cards prepared by the C.M.A., "Produced in Canada" and "Keep Your Fellow Canadians Employed by Buying Canadian Products and Manufactured Articles" also formed an important part of the decorative scheme.

The example set by the Galt manufacturers is one that might be successfully followed in many other industrial centres. Such an exhibition is more than an effective advertisement for the manufacturers taking part in it; it creates a feeling of good will towards them on the part of their fellow citizens and fosters a civic pride that makes for better work on the part of everyone. It is also a great help to the Made-in-Canada movement in general, for people realize more clearly what its importance is when they see a display of products actually manufactured in their own town. The people of Galt have

good reason to be proud of their exhibition, and the local hospital, which receives the proceeds of the fair, should reap a substantial benefit.

Following is a list of the exhibitors and the lines displayed:—

Arrow Signal Lamp Co., automobile signal lights.
Bailey & Son, H. F., "Himman Milking" machines.
Beaver Mfg. Co., "Herbageum" and "Aronateum."
Biggar & Son, Wm., working mitts and auto gauntlets.
Canada Machinery Corporation, wood and iron working machine tools.
Canada Stoker Co. Ltd., The, automatic stokers.
Canadian Brass Co., Limited, brass goods for plumbers, gas companies and waterworks, "B.O.T." closet combinations.
Canadian Cereal & Flour Mills, Ltd., famous brands of Rainbow, Star, Gold Seal and Echo flour.
Canadian Edge Tool Co., wood chisels, knives, general edge tools.
Canadian Potato Machinery Co., Ltd., seed cutters, planters, sprayers, diggers, tillers, stable equipment.
Clark, J. & J.
Cowan & Co. of Galt, Ltd., wood working machinery.
Cooper, E. M., mattresses.
Cut Soles, Ltd., cutters of oak tanned out soles for men's, women's and children's shoes.
Dixon, W. A., "Dixon" bread.
Dominion Tack & Nail Co. Ltd., tacks, cut nails, metaline and chair nails.
Elliott, J. & R., Laundry Soaps, textile soaps and lard oil.
Elliott & Whitehall Tool Co., milling cutters, reamers, gauges, jigs, fixtures, lathe mandrels, etc.
Galt Art Metal Co., sheet metal ceilings, sidings, roofing, cornices, skylights, ventilators, etc.
Galt Brass Co., Limited, "Perfecto" brass goods, "Vibro" No Trouble tanks.
Galt Chemical Products, Ltd. "Charm."
Galt Collegiate Institute, Manual training work.
Galt Electric & Gas Fixtures Co., Ltd., electric fixtures.
Galt Foundry Co., grate bars and iron castings.
Galt Hat Co., ladies' and children's hats.
Galt Knife Co., Ltd., machine knives, shear blades, circular cutters, etc.
Galt Knitting Co., Ltd., The, "Tiger Brand" underwear and knitted specialties.
Galt Machine Screw Co., Ltd., screws, nuts and milled specialties.
Galt Malleable Iron Co., malleable castings.
Galt Paper Box Co., The, plain and fancy boxes.
Galt Shoe Manufacturing Co., Ltd., youths', misses' and children's high-grade footwear.
Galt Stove & Furnace Co., Ltd., "Banner" stoves, Galt Wood Products Co., sleighs.
Gill Brass Goods Mfg. Co., plumbers' supplies, etc.
Galt Welding Co., oxy-acetylene and electric welding.
"Banner" pipeless furnaces.
Gardiner & Son, P. W., doors, sashes, columns, interior trim.
Getty & Scott, Ltd., "Classic Shoes" for women and children.
Goldie & McCulloch Co., Ltd., power equipment, safes and vaults, "Rees Roturbo" pumps.
Greenfield Tap and Die Corp., of Canada, Ltd., taps, dies, screw plate gauges, pipe tools.
Hi-Speed Tools, Limited, gauges, screw plates, taps, dies, jig fixtures.
Kaitting & Son, Geo. C., washing machines.
Jamieson, N., polishing and plating.
Katie Foundry, plumbers' and hardware cast iron goods (pattern-making machine work).
Langley & Austin, brass, bronze and aluminum.
Little, A. C., Ltd., sweaters and knitted goods.
castings and specialties.
MacDonald Bros., novelty woodworking.
McCaskey Systems, Ltd., counter check books, account register systems.
McDougall Co., Ltd., R., machine tools and pumps.
McIntosh, C.A. & C., ointments.
Narrow Fabrics Weaving Co., woven tapes, labels and belting.
Newlands & Co., Saskatchewan buffalo robes, eiderdowns, gloves and shoe fleece linings.
Peard Manufacturing Co., Wm., sweaters and sweater coats.
Perfect Machine Co., lathes, grinding and polishing machines, drill presses, etc.
Peter Hay Knife Co., Ltd., machine knives.
Preston & Schwartz, Ltd., taps, dies and thread cutting tools.
Riverside Silk Mills, Ltd., silk yarns.
Roelofson Elevator Works, elevators—freight and passenger, ornamental wire and iron works.
St. Clair Bros., steam engines, concrete mixers, contractors' machinery.
Scroggins Shoe Co., The "Renown" shoe for boys and girls.
Sheldons, Ltd., fans, blowers, heating, ventilating, etc.
Shimer Cutter Head Co. of Canada, Ltd., wood cutting tools.
Sharly-Dietrich Co., Ltd., "Maple Leaf" saws.
Stauffer-Dobbie, Limited, Turkish towels, "Bonnie Down" cloths and hammocks.
Stevens Co. of Galt, Ltd., The iron tools, special machinery.
Sturtevant Co., B. F., ventilating, heating, pneumatic conveying, etc.
Thomas Bros., Ltd., carbonated beverages.
Turnbull Co., Ltd., The C., "Ceetee" knitted underwear for men, women and children.
Victoria Wheel Co., Ltd., carriage materials.
Yale Shoe Mfg. Co., Ltd., men's, boys', growing girls' and children's shoes.

Canadian Millers Hold Annual Meeting of Their Association in Toronto

Report of the Proceedings

MILLERS from all parts of Canada assembled in Toronto on November 17 for the first annual meeting of the Canadian National Millers' Association, an organization formed last year. Brig-Gen. A. E. Labelle, St. Lawrence Flour Mills Co., the president, was in the chair.

A great many problems of importance to the milling industry were discussed at the meeting, chief among them being freight rates. At the present time wheat is being moved for export at a rate of approximately nine cents per hundred pounds less than flour. This is in direct opposition to the interests of the country, and the Executive officers of the Association received full authority to deal with this matter as they saw fit.

Another item, which was discussed, was the Sales Tax Act, and several questions were put to the executives asking for rulings on different matters and there was no doubt that the officers of the Association had this matter at their finger tips. A hearty vote of thanks was extended to them for their work in having this tax lifted from mill products because of the fact that it was a very inequitable tax due to the peculiar nature of the milling industry.

Problems Considered

The by-laws of the Association were read and adopted and application has now been filed for the incorporation of the Association.

Problems in connection with the inspection of Ontario wheat were considered, and it was decided that something should be done to relieve the Canadian miller. A special committee with A. C. McLeod as chairman was appointed to go into this matter.

The Association were unanimous in their opinion that a special tariff on corn and screenings granted by the railways and confirmed by the Railway Commission was not fair, and action should be taken by the Association to have this tariff either cancelled or put on a more equitable basis.

H. R. Pousette, Chief, Foreign Intelligence Department, Department of Trade and Commerce gave a short address on the facilities afforded by Canadian Trade Commissioners in different parts of the world.

A luncheon was served at noon, the hosts being the retiring executive committee.

New Officers Elected

Officers elected for the ensuing year were as follows,—Brig-Gen. A. E. Labelle (St. Lawrence Flour Mills) president (re-elected); Geo. A. MacDonald, (Quaker Oats Co.) vice-president (re-elected); J. E. Macfarlane, (Western Canada Flour Mills), 2nd vice-President. (re-elected); F. C. Cornell, (Can. National Millers' Assoc.) Secretary, (re-elected).

A feature of the meeting was the presidential address of General Labelle. This gave a most comprehensive review of the industry, showed its present condition and dealt exhaustively with its various problems. The address follows in full,—

"Like all new organizations, our Association has had to meet several serious problems to begin with, but I think that we can congratulate ourselves that the first year has shown really better results than anticipated. We have succeeded in settling several vexed questions, and we are still working at a few that were left over and which we hope to settle before long.

"At the end of the report will be found some interesting statistics that I would advise you to read; they will keep before you the great importance of our industry and the consequent necessity of organizing it on a proper basis, as it means so much for the future of our country. Milling is essentially the basic industry of Canada; our supply of raw material is practically unlimited and the quality of our wheat is by far the best in the world. So look at the possibilities ahead of us! You will see that there are 1255 mills (of which 400 are commercial ones), that the capital invested is over \$76,000,000, and the production for last year was worth over \$262,000,000. In the list of Canadian industries, we stand seventh as to capital, but first as to production.

Must Increase Exports

"Although our export business (6,886,000 bbls) has been a satisfactory one, showing an increase over pre-war years, even after deducting the amount exported to the U. S. (1,750,000 bbls. last year), still this is not enough; you must remember that our milling capacity is nearly 30,000,000 bbls. a year, that our domestic market takes only 8,000,000. We don't expect to export all our wheat in the shape of flour, but we should certainly do better than we are doing.

"The most serious obstacles to the expansion of our export are the rates of freight, and it requires continual watching, on the part of our officers, to keep track of what is going on in that line. From time to time, special export rates are made by ocean steamers or railways on wheat to meet, special conditions; still that wheat is laid down on the other side, at a price which our flour cannot compete against, the difference in the freight being in some cases more than the mills profit.

The Rate Question

"At the present moment, this is the position we are facing and all our energy should be used to put a stop to it. This is just as important as protection. Any special export rates should apply on both wheat and flour; otherwise, there is no use of talking of protection in this country, it simply means giving with one hand and taking it back with the other.

"Rates made in that way will help everyone: the farmer will get better prices for his grain, a larger supply of mill feeds, which is absolutely necessary for him to increase his cattle raising and greater production of butter and cheese. All this increased production will be felt by everybody and will result in lower prices to the consumer, increased export in all these commodities, more freight to handle and improvement in exchange. It is a very short-sighted policy on the part of the carriers to do otherwise; it is like killing the hen that laid the golden eggs.

"If in the export market there are conditions which we cannot control, the same cannot be said about the domestic market; here, it depends a great deal on us, whether the conditions are good or bad. If the mills put in force good, sound, sane methods, then business will be satisfactory; but if through ambition or wanting to get temporary or undue advantages, some mills, large or small, resort to pernicious practices, then everything will go wrong. Such practices as guaranteeing prices, selling without a firm

contract, or paying private commissions will do nobody good. This is our work. We are not in existence to fix prices. Every miller is perfectly free to sell at what he likes. We only ask him to follow sound principles and figure out his cost prices. Let him sell his flour in the same way as he buys his wheat, and he cannot go very far wrong.

Unfair Attacks

"There is another subject that has never been brought up in the Association, but I think the time has come to put ourselves on record—I refer to the continual and unqualified attacks, made on every occasion by western farmers against the mills. It must keep some of them busy when they are not attending meetings, looking up the dictionary to find new epithets to fling at us. Personally, I am very suspicious of people who are continually accusing others of being thieves, profiteers, etc. They must have faith in the saying of the French writer, who years ago wrote that if one lied long enough about anything, he would eventually succeed in convincing a lot of people that it was true. We have never answered them as we know all they say about the mills is practically false, but still it gets annoying in the end.

"They do not seem able to hold a meeting or set up any argument unless they start abusing the mills, accusing them of every known and unknown crime, not one of which they even proved. Recently they again asked for a control board, asking the Government to help them to do exactly what they are accusing the mills of doing, sell at higher prices than circumstances warrant. They want a board to put up the price of wheat and reduce the price of flour. They accuse mills of making too much money, at their expense, etc., I suppose you all remember when reciprocity was discussed some years ago, how the Canadian farmer claimed it would increase the price of wheat and the American farmer claimed it would reduce it? I am afraid that our friends in the West have no sense or they would see how ridiculous some of their statements are and they must have a very bad case to have to back it up with such arguments.

Elevators

"It is not strange that millers are repeatedly asked by farmers to put up elevators to buy their grain in competition with elevators owned by farmers organizations. As far as the mills are concerned, the great bulk of them do not buy from the farmers direct. My own firm, for example, don't buy a bushel from farmers and the mills who operate elevators buy a large portion of the supply outside. They buy on the open market, from grain dealers or from farmer companies and pay exactly the same price as other competitors pay for grain for the domestic or foreign markets. Agitators, politicians or would be politicians are so fond of using words like "the big interests", "monopolists", "autocrats", etc. No one exactly knows what it means but they think it sounds well,— "It's a good filler."

"Talk about 'monopolists'! Look at the census returns,—1255 mills in Canada, located in every province of the Dominion. The fact that you all know well, is that there is no industry in which there is such competition. A milling capacity of thirty

million barrels a year to get a possible share of the eight millions required.

"The mills in Canada have no apology to make for their profits. They strictly deny that they have been profiteers. They are not afraid to state and to prove that their percentage of profits has been smaller than any industry. Anyone can find that out for himself, if he will only keep posted and think before talking.

"I have purposely called the farmers our friends. We consider them so and I cannot understand why they do not feel the same way towards us. Their success is ours, and if they don't make any money, they will get out of raising wheat, which would be disastrous to the whole country, and we are in favor of every help being given them. But we certainly don't want any control board. I am not aware that any of these boards ever did any good, even during the war.

"We don't want, on principle, any class legislation. We want laws, rates, etc. to be uniform. I think that the tariff should protect all industries alike, not have it like a few months ago: the mills then had their products on the free list and all they had to buy (except grain) was on the protected list.

"It would be a great thing if this question

of tariff could be taken out of politics. The majority of this country are convinced that protection is our best policy and it should be settled once for all and stop all theorists from bringing up free trade-ideas which simply causes a lot of unrest and uneasiness.

"May I make again a strong appeal to the millers, who are not already members, to join our Association with the least possible delay. I especially ask every member today to bring at least one other member. This should be easy. We think we have done a great deal with our present membership, but we could do much better if we had a larger membership. What the Association has been doing is for the benefit of all mills. It does not matter where they are situated or how much flour they make, they are all interested in our work. Don't you think that the small yearly subscription is a trifle, compared to the benefits they would get?"

"In closing I would like to thank specially the board of directors and the officers of the Association for the very cordial and precious help they have given me at all times during the year. Sometimes the atmosphere got a little dark, but it cleared up very soon, under the good will and intentions of every member."

Peru's Economic Condition

Opportunities for Manufacturers and Industrialists.

By DAVID W. CADDICK

Courtesy of the Empire Mail

PERU is one of the countries which ought to gain by the opening of the Panama Canal; indeed, the canal has already proved a substantial boon. During the war it facilitated the shipment of Peruvian products when transport conditions were exceedingly difficult in other parts of the world. The principal exports are sugar, copper, llama and alpaca wool, rubber, cocaine and valuable minerals including copper, gold and silver. Another export is guano, but the right to exploit these deposits, as well as state railways, lands and mines was given to the Peruvian Corporation in 1889, for a period of 66 years, as compensation for taking over the nation's debt. With arrears of interest the amount owing was more than £55,000,000, Great Britain being by far the largest creditor.

Owing to the disastrous war with Chile in 1879-1882, Peru lost an important asset in the nitrate province of Tarapaca, which now belongs to Chile. She was also obliged to consent to a Chilean mandate over the provinces of Tacna and Arica for twenty years. A plebiscite ought to have taken place at the expiry of this term and, in event of the inhabitants electing to return to Peruvian nationality, an indemnity was to be paid to Chile. This appeal to the populace has never been made, and it is unlikely that the provinces of Tacna and Arica will ever be returned to Peru. As this question is a constant bone of contention between the two nations, it is hoped that a satisfactory solution will be found.

The area of the country is about 680,026 square miles. It is divided physically into three zones—the coast, the Sierra, and the mountain or forest region. These zones differ widely in their characteristics and products, owing to the climatic conditions varying at the different altitudes. The present population is more than 4½ millions. Of these half are Indians, and many are "Mestizos" or mixed breeds. Chinese and Japanese immigration has been permitted for many years. Obviously for such a country, the population is scanty.

I have already mentioned the arrangements made with the Peruvian Corporation for past debts. The States debt is now quite small. It was £5,802,144 in 1918. This amount is in Peruvian pounds. In 1901 Peru adopted the gold standard, and the pound is identical in quality, size and weight with the sovereign we used to have. English gold coins are legal tender. The pound is divided decimally into 10 soles of silver, each in turn divided into 5, 10 and 20 cent pieces. The State debt given above is lower than the previous year, when the total was £6,197,326. The exchange on London used to be reckoned according to the number of pence in a silver sole. As there are ten soles in a pound, the sole ought to be at 24 pence to be the same value as the English pound. For many years before the war this was practically the case, but in 1918, the exchange fluctuated between 28.860 and 26.880 and has usually been against us since. We have taught other nations to adopt the gold standard, but have been obliged to abandon it ourselves.

The expenditure voted by Parliament in 1919 was £5,169,144 or 7 per cent more than in the previous year. The largest item of expenditure in 1918 was the Army (526,833). On the other hand the Naval expenditure was small at £73,334. The other large items were the Civil Service, £245,948. Parliamentary expenses, £155,405; Justice, £153,116; and Customs, £38,095. The total in the Savings Bank of Lima has increased from £172,576 in 1900 to £504,134 in 1913, and £628,274 in 1918.

Increased Production and High Prices

The exports of Peru have usually exceeded the imports, but, during the war, imports were restricted whilst exports increased in quantity and price. The exports thus doubled the imports in value, making the present financial condition of the country strong. The demand for manufactured goods from other countries is consequently large. The following shows the extent of the import and export trade since 1912 in Peruvian pounds:—

	IMPORTS	EXPORTS
1912††.....	5,140,338	9,438,581
1913††.....	6,088,776	9,137,780
1914††.....	4,827,930	8,767,790
1915††.....	3,095,544	11,521,807
1916††.....	8,683,150	16,541,063
1917††.....	13,502,851	18,643,414
1918††.....	9,705,113	19,972,595

As the imports from Australia ceased, it was necessary to increase home production, which hitherto had provided a very small proportion of requirements. In 1918, 63,000 metric tons were grown in Peru, whilst 59,000 metric tons of wheat and 3,471 tons of flour were imported. Thus about half the bread consumed by the Peruvians was made from home-grown grain. There were 97,848 hectares under wheat and 150,000 hectares more bearing potatoes, onions, maize and native vegetables. The cultivation of cane sugar is rapidly being extended. In 1918 there were 250,480 hectares, but the figure is probably higher at the present time. However, after the home consumers were fully supplied, and allowance made for waste in storage, nearly 200,000 tons were exported, the total production being about 285,000 metric tons, against 185,000 metric tons in 1913. Rice cultivation has also increased, and, as in most South American countries, cotton-growing has received special attention.

Trade and Industrial Opportunities

Textiles. The cultivation of textile plants such as the ranice, jute and the manufacture of ropes, cords, mats, nets, sackcloth, etc., and also the extraction of fibres, offers opportunities. Seed crushing plant is required, also cotton-spinning machinery.

Cereals. With the extension of wheat growing areas steam ploughs and other machinery are urgently needed.

Sugar Factories. The installation of central factories for grinding and treatment of cane for agriculturists is indispensable. These factories manufacture sugar and alcohol.

Portable Railways. These are badly wanted for the improvement of transport from agricultural districts to the ports, but we shall not be able to oust the Americans whilst our prices are from 10 to 20 per cent higher than theirs, and delivery two or three times as long.

Modern Dairies. Factories for making butter and cheese, especially if organized on the co-operative system, are assured of success. Modern appliances for dairies are in request.

Wines and Spirits. There is still scope for the cultivation of the vine and the making of wines.

Tanneries. Skins abound in Peru, and are suitable for all classes of leather goods, boots, harness, etc. Also for "Morocco" goods, gloves, etc.

Paper Factories. Paper making and printing industries are two of the industries which are now being established in all parts of South America, and certain kinds of paper could be profitably made in Peru.

Army Equipment. We have seen that over half a million is spent on the Army each year. Materials were formerly purchased from both France and Germany. There is now a chance for us to supply uniforms, accoutrements, rifles, guns, tanks and aeroplanes.

American Competition

We are at present seriously behind America. During 1920 the U.S.A. trade with Peru totalled 110,768,092 American dollars, or 8 per cent. more than in 1919, the exports consisting largely of cotton goods, steel rails and structural iron and steel. We can only regain this market by considerable effort. Our motto should be "British Manufacturers, British Capital and British experts to aid Peru and other South American countries in their development." All three will be eagerly received and welcomed.

A Review of Business Conditions in Canada, the United States and Other Countries

ILLUMINATING EXTRACTS FROM VARIOUS SOURCES

THE tenor of most reports on trade conditions throughout the world is to the effect that gradual improvement is taking place. After the many months of contraction, it is inevitable that a turn for the better must occur sooner or later, and the consensus of opinion points to the turning point having been reached this fall. There is no expectation that the upward movement will be other than slow and perhaps scarcely perceptible, but, as it proceeds, it will gather momentum and in due course become a real force, inspiring confidence and restoring good times. There are still dark spots but these will gradually disappear.

Canadian Retail Stocks Reported to be Below Normal.

A review of conditions in Canada, based on the replies received to a questionnaire sent out to several hundred bank managers, appears in the Financial Post. The consensus of opinion points to a shortage of goods in the hands of the retail trade.

"The replies are indicating also that in a general way there is still room for adjustment of retail prices on the basis of the lower values for commodities now prevailing. This refers to clothing, boots and shoes and hardware, rather than to foodstuffs. Further opinion also prevails that reductions now made would encourage greater buying, although in many centres, particularly those in many agricultural districts, demand has been curtailed to the minimum on account of the crop situation. This is a factor which must be taken into consideration in reaching any conclusion as to the volume of buying likely to develop in the near future through the retailer. Stocks generally are small and the merchants are buying on a hand to mouth basis to a large extent. They are likely, therefore, to find themselves short of goods in the event of a resumption of demand on the part of the public but as to when that demand is likely to be again experienced on a normal basis is difficult to foretell, particularly in the case of Western Canada, where interest in the business outlook now centres to a large extent.

"The reports from Manitoba, Saskatchewan and Alberta which have been received indicate a larger percentage of business centres in which stocks of merchandise are below normal than other sections of Canada. The replies are about evenly divided as between "below normal" on the one hand, and "above normal" on the other; one reply reads "fifty per cent. below normal." It is indicated, however, that goods are moving slowly and that merchants are evidently keeping their stocks down in view of the curtailed buying power. Prices have been adjusted to a considerable extent but apart from foodstuffs opinion prevails that they are still too high and that some improvement in buying would result if further reductions were made.

Reports from British Columbia so far received indicate stocks in hands of retailers about normal with prices still somewhat above the level warranted by commodity values. In the Maritimes it is indicated that more stocks have been reduced to below the normal than are now above, while many are regarded as "normal". From Quebec the indications are that the conditions of retailers' Stocks is "normal" in the majority of instances, but a few more reports say that

The accompanying material is taken from a number of sources which may be regarded as authoritative. They include the monthly letters or bulletins of banks and the pages of well-known business and financial publications. When thus assembled and compared, it will be found that they supply a very fair idea of existing conditions throughout the world and furnish as accurate a key as possible to the future.

—The Editor.

they are still above than those which say that they are below. From Ontario the reports are about equally balanced in the three categories, but the larger centres indicate a larger measure of adjustment."

Economy and Simplicity the Requisites to Meet Trying Times Ahead

While declaring that business is better and sentiment throughout the United States reflecting a more courageous attitude, the National Bank of Commerce in New York, in its market letter issued on November 18, stresses the need for economy and careful personal supervision, on the part of executives,

"Such progress as has been made by the business community toward normal conditions results from a realization that artificial levels of activity will not again be reached in any period near enough to affect the problems of today, and from a determination to practise economies of operation more rigid than heretofore thought possible. The need of personal effort and economy is also being increasingly recognized in giving a day's work for a day's pay and in care as to personal expenditure. Business men and executives now recognize that henceforth they must give the most thorough personal attention and application to their enterprises.

"Some part of the recent gain in business is unquestionably a result of seasonal demand. Permanent improvement depends to a large extent on foreign buying power, and even more on the adjustment of conditions under which the farmer operates. The last three years have clearly shown that the European situation can be stabilized only by the political and economic efforts of the countries concerned. Domestic conditions can be bettered by steady determination on the part of corporations and individuals to secure greater efficiency and to practice greater economy. This will result in gradual readjustment of the burden of price inequalities now resting on the farmer.

"In the period immediately ahead, manufacturers will face the most severe competition in a generation. It is now clear that many important industries are seriously overbuilt, when measured in terms of effective demand here and abroad. There is no method by which competition can be avoided, but there are methods by which it can be successfully met. Overhead charges should be rigidly examined and cut to the lowest point consistent with productive efficiency. Costs should be critically studied and such examination should include not only factory operations, but the entire producing organizations. In periods of high profits, useless frills are certain to be intro-

duced into the best systems. Simplicity is now of necessity the watchword and much careful but courageous elimination is necessary.

"In many lines, labor costs must be further reduced. Such reduction can in part be attained by lower wages, and in part by increased efficiency in organization for production. A considerable part of labor inefficiency is at times due to actual defects in plant and organization. Business has two duties, first, to provide the best means for efficient production by its labor, and second, to insist on a day's work for a day's pay."

Improvements in South American Conditions Reported by Banker

At the Annual Meeting of the Anglo-South American Bank held in London on October 29th, the chairman spoke as follows on the trade outlook:—"A favourable point in the general trade outlook was the improvement in conditions recently reported from various parts of South America. The copious rains which had fallen in Argentina, following a period of long drought had greatly improved the crop outlook there and this should place the country in a better position to absorb the large quantities of goods imported during recent years, and thus clear the way for a renewal of more active trade conditions with the country. Similarly in Chile the removal of the nitrate deadlock was promising an improvement in general business, while Peru stood to gain financially from the recent recovery in the price of cotton. In all cases however, the stock of goods were still at a high level and it must take some time before they were moved into general consumption and longer still before replacement orders were received in any important volume."

Improving Trade Conditions are Reported From South Africa.

In the latest issue of Industrial South Africa to hand, the following estimate of trade conditions in that Dominion is supplied:

"As a result of inquiries we are led to believe that there is a "better feeling" about business. Just exactly what this recurring phrase means is difficult to state. It might be descriptive of any of a dozen psychological changes that could enter into the situation.

If it means that people generally have begun to realize the causes that have thrown industry out of balance, and to appreciate the things that must be corrected before conditions come into equilibrium again, then we should say that the reported "better feeling" constitutes an important advance towards reaching normality. If, however, the "better feeling" means simply that people are merely smiling and waiting more patiently rather than setting themselves seriously to the task of wage and price reductions and other adjustments that are necessary then we fear that it signifies but little!

"Evidence is cumulative that the adjustments are taking place. They are slow, but it takes time for a knowledge of conditions to reach all classes and divisions of the population—particularly so in a country like South Africa—and for them to make up their minds to give the co-operation that is necessary to bring industrial conditions back

into balance. Meanwhile, it will aid in the cultivation of patience to realise that conditions in the Union are by no means so bad as they might be, and that considering all the circumstances the volume of trade is really surprisingly large. So far as we can ascertain, it appears that retail store sales so far this year have been holding their own in physical volume, although values are lower owing to lower prices. This means that the prospects of wholesale merchants are brighter, particularly in commodities of common trade. Orders have been withheld for months pending a more settled outlook, but the time has now arrived when buying must be done for current trade. The reflex action is seen in improved factory production in various lines, all of which breeds a spirit of optimism that the worst is passed."

What the Outlook is Like in South and North Manchuria

The following interesting review of conditions in South and North Manchuria is furnished the British Chamber of Commerce Journal, Shanghai, by H.M. Commercial Counsellor of Legation:—

"There are few signs of recovery yet from the state of stagnation into which the trade of South Manchuria has fallen since the slump of last summer. A slightly increased demand for piece goods has enabled British firms here to liquidate a portion of their stocks at a considerable loss, though at prices which have not in every case been below replacing cost. The export trade has been a little more buoyant than the import trade but bean cake and wheat appear to be the only local products for which there has been any serious demand. The export of grain to the famine districts has now all but ceased. Fortunately the crops are in a very promising condition and unless floods should supervene the harvests both in North and South Manchuria will be record ones. The output of wild silk also promises to be above the average both in quality and quantity.

"Chinese dealers in native produce all over Manchuria are up in arms over the announcement made in the middle of April by the Japanese authorities at Dairen that gold was to be the standard currency at the local exchanges for all deals in produce for delivery after October 14 next. This means that Chinese dealers will have to sell their produce on the Dairen exchange, where most of the buying and selling of local produce for export is done, in gold yen instead of in Chinese currency. The objections of the dealers to this new order is based on the fact that, if it is enforced, the exchange risk falls entirely on their shoulders as sellers and not, as hitherto, on those of the Japanese buyers, who have facilities through their banks of settling exchanges and otherwise minimizing their risk which Chinese dealers do not possess. As contracts are made as much as four months ahead the risk is more, they allege, than they can bear. So far, in spite of the very considerable pressure brought to bear on them, for the change is almost as unpopular with the Japanese dealers as it is with the Chinese, the Dairen authorities have not rescinded the order, the reason they give being that the question is one of Imperial policy and was decided not at Dairen but at Tokyo. In the meanwhile the Chinese dealers have withdrawn from the local exchanges and all forward business has ceased.

"Commercially speaking Harbin is at a very low ebb and there seems to be no immediate prospect of any improvement. It is overstocked with goods of all kinds imported at a time of high prices and high freight rates, and the collapse in the value of the rouble, the general fall in prices through-

out the world, universal business depression and the failure to revive trade with Siberia have combined to render stocks unsaleable except at sacrificial losses. The result is that money is very tight and bank notes for advances and overdrafts are prohibited, anything from nine to eighteen per cent. interest being charged for accommodation. In the native town of Fuchiatien, Chinese rates for short term loans are as high as three or four per cent. per month, depending on the nature of the security offered.

"The crop prospects for this year are not good, less than a fifty per cent. wheat crop being expected. The bean crop is better but still not up to the average. This will adversely affect the freight-earning capacity of the Chinese Eastern Railway, and as the railway is the life blood of the place Harbin cannot fail to suffer all round.

"The uncertain political situation is also a serious factor in militating against any revival of prosperity. Until relations with the various Governments in Eastern Siberia are put on a proper basis there is no prospect of any steady trade with those regions, while the depredations of the numerous brigand bands which are the scourge of Manchuria render even local trade precarious."

Chinese Market Beginning to Take on More Hopeful Tone.

Reporting on Chinese trade, the Trans-Pacific Magazine for November finds hopeful signs in recent developments. It deals with the subject as follows:—

"Foreign trade in China is beginning to adopt a generally optimistic tone, although actual activity in the various markets is not expected until the later fall. There seems to be every indication of a revival and the swinging of the pendulum back to normal and perhaps beyond.

"In the last few months the Chinese dollar has come back strong, and the attitude of both the Chinese and foreign dealers is becoming more settled. According to the annual report of Mr. H. H. Arnold, president of the American Chamber of Commerce of China, the liquidation of existing stocks is progressing well—not without some loss, however, to the holders. He also states that the stocks held are below normal and that a revival must necessarily bring in more goods.

"A rainy season of several weeks over the entire country has brought the needed relief to the Chinese farmer, and crops marketing in the fall should be done on a large scale—not to compare with similar movements in the United States, but on a large scale for China. Generally speaking, conditions are settled so far as political aspects are concerned with the exception of the Upper Yangtze River region where troop mutinies have resulted in the destruction and looting of a large portion of the cities of Ichang and Wuchang.

"Stocks in all sections of the country, especially in the piece-goods market, are at a low ebb. The piece-goods situation which was the most aggravated of all China's import markets, is showing a gradual but steady improvement and other merchants are working out a revised form contract, with the assistance of the Chinese guilds in the trade which will, it is predicted, prevent wholesale cancellation and defalcation—a condition that has run riot during the present crisis.

"Exports are beginning to move slowly. Silk is being exported in some quantities. Hides and skins are shown on outgoing cargo returns and other products are coming out of their enforced lethargy.

"On the whole, the market of China is

beginning to take on a much firmer tone, and activity is increasing. Business men with long experience in the field predict that the next four or five years will see a healthy and steady growth of trade that will surpass eventually the high tide of the war period."

Trade in Mexico is Dull, Waiting World-Wide Improvement.

A brief review of Mexican economic conditions is contained in a recent issue of the Chamber of Commerce Journal, official organ of the London Chamber of Commerce. It is as follows:—

"In common with other producing countries Mexico has been suffering acutely from the world-wide trade depression, unemployment having been serious, although a slight but definite improvement in the general economic situation has recently been noted. The Mexican Treasury has lately been compelled to take urgent steps to provide gold currency to replace the estimated 40,000,000 pesos which were clandestinely exported during the early part of the year. According to recent American consular reports, negotiations were under way in June for the importing and reminting of fourteen million dollars worth of Swedish gold. Since the beginning of the year the Ministry of Finance has sought to rehabilitate the 25 sequestered banks by permitting the reopening of such of them as could show an excess of 10 per cent. of assets over liabilities, and eleven of these banks are reported to have met the auditor's requirements. It is hoped to relieve the present rigidity of the wholly metallic currency system by opening the governmental Sole Bank of Issue, on a capitalization of 25,000,000 pesos supplied by the Government, to issue paper currency. The banks fear this issue, and in anticipation of it have already tightened up on credits. A practically new banking system has to be built, and it is hoped to insert in it desirable features of the American reserve system.

"Under existing currency and banking systems, the question of foreign exchange enters little into commercial questions, but, if the Government emits large issues of paper, foreign exchange will again become a most important factor in commerce. The normalization of prices is proceeding more slowly and more irregularly than in the United States. Rock-bottom prices have probably been reached in the costs and markets for henequen and similar fibres, cotton, coffee, rubber and agricultural products generally, and possibly for petroleum, but in regard to mining and manufacturing there is yet a distance to go. There are no reliable figures on unemployment, but estimates vary from 1,000,000 or more, as made by labour leaders, to 150,000 or less, made by Government officials. The fields most affected were first of all mines, followed by farms and now oilfields. Farm labourers are suffering unemployment by reason of the agrarian policies of the Federal Government and of various States, and numerous large plantations are lying idle, or partly so, on account of confiscation, or through fear of it. The unemployment situation has been aggravated by the repatriation of many Mexicans lately employed in the United States. The Government has offered to return certain confiscated properties on condition that designated numbers of repatriates be employed on them. Production costs have not yet been fully adjusted, and tariff action may tend to hold them up. All trade is dull, and the condition will be corrected only by an improvement in world commodity markets and greater confidence in the maintenance of stable government."

British Columbia Manufacturers Take Strong Stand on Eight-Hour Day Legislation

Memorandum of the B. C. Division to the Legislature

WE are opposed to the eight hour day legislation asked for. Any legislation which governs the hours of labour must be national in character or you will handicap the industrial development of British Columbia. This factor was fully recognized by the Legislature last session when passing eight hour day legislation conforming with the Peace Treaty of Versailles, it being provided that it should only become effective when other provinces in Canada had agreed to enact and enforce such legislation.

The opinion held at the time the Peace Treaty of Versailles was made is being realized now by many of the subscribing nations, namely, that an eight hour day is impracticable as universal in industrial life, because it attempts to place all forms of industry under uniform conditions which is impossible when economical production is considered, and further, because it makes for a weekly rather than a daily standard, of production. The tendency of legislation of this nature is to make it a wage law rather than to accomplish the purpose aimed at. The better policy for governments to pursue is to regulate the hours of employment by legislation in industries which by their character make necessary such control in the interests of health and safety—both for the employer and the public, and leave to the employer and employee to contract under actual conditions existing, both as to locality, and as to the general relationship of hours of labor to both domestic, provincial and international competition, through all of which conditions production is governed.

A Joint Trust

It is held that industry is recognized as the joint trust of capital and labour and that they must be employed productively and to their full capacity. The standard of living is directly proportional to production. Who therefore can better determine conditions than those who compose the joint trust and are fully familiar with conditions pertaining thereto. The best proof of the impracticability of the uniform application of an eight hour day is the fact that so many nations who agreed to the Versailles Treaty are not today abiding by its conditions. Reports from Germany indicate anything but an eight hour day; France in many industries has abandoned it; Belgium, whose Act only came into force October 1st, 1921, according to the "Labour Gazette" for October, published by the Department of Labour, Page 1238 finds that exemptions both of general and particular character must be made. Great Britain found many exemptions would be necessary, particularly as follows:—to members of the employer's own family; to domestic and outdoor servants, except when employed for purpose of gain; to persons holding responsible positions of management; to persons who are in receipt of fixed wages which have been set upon a basis of hours less than the statutory working week and which covers overtime necessary worked to enable such persons to perform their duties to their employers and to the workers under their charge; to persons employed in a confidential capacity and not usually employed in manual labor; to any master seaman or apprentice on a seagoing ship; to any person employed in agriculture, horticulture and forestry.

This is a copy of the memorandum presented to the Government and members of the Legislature of British Columbia by the B. C. Division, C. M. A., on November 9, 1921, in opposition to a motion introduced in the House, to bring into effect on May 1, 1922, the 8-hour day legislation enacted last spring. The latter contained a proviso that the act should not come into force until similar legislation had made the 8-hour day effective in other provinces.

This is clear and absolute proof that other nations cannot accept carte blanche eight hour day legislation.

The national basic wealth of British Columbia is her timber, agriculture, minerals and fisheries.

Economical development of these resources to as near as possible the finished product required in the world's markets is the easiest road to the acquisition of wealth by our citizenship and the consequent comforts afforded by wealth to all, but this fact is apparent and must be admitted, that we can only market our production on a competitive basis with other nations selling the same commodities, and this is only possible with consideration of those employed in labor, as in many instances wages represent from 60% to 75% of the value of the finished article. Such facts as these must be considered when attempting to regulate hours of labor.

For instance, the timber industry must reckon with conditions which prevail in other provinces, and especially with conditions to the south in the United States. We must utilize all daylight in certain seasons, climatic conditions which vary greatly in this province have to be considered as well as the height of water in the rivers at certain seasons; snow on the ground in other sections; too much rain for the comfort of the outdoor worker—all of these affect largely logging operations and contingent work.

Agriculture is another industry in which climatic conditions play a very important part. The farmer must gauge his seeding and harvesting operations always in accordance with the weather. In the fruit industry it is the same—crops must be picked and marketed often in a limited time. In the case of a staple fruit such as apples, the time for attention in growth or harvest is limited. In contingent industries, such as packers and canners which have to take care of fruit and vegetables, they cannot recognize any set hours of labor at certain periods of the year, but must be governed largely by local conditions. The farmer at certain periods of the year cannot avoid utilizing every hour of daylight.

The Fishing Industry

In the fishing industry, is it to be expected that the product of our rivers and seas will be kind enough to oblige us by taking our hooks, entering our traps or nets on an eight hour day basis without any regard to tides, winds or natural conditions? We submit they will not. What then of the raw product? Will not the packers or curers have to give constant attention to these fish until at least they are beyond the point of going to waste? It must be remembered that the fishing industry, especially in salmon canning, is today in direct competition with the

Japanese product in the world's markets. While we know that in Japan hours of labor are not seriously considered and that the standard of living is much lower than ours no one wishes to see these conditions apply in Canada, but in self-preservation, we must not be so hampered by legislative restrictions that our product cannot be marketed.

In submitting this brief to the members of the British Columbia Legislature on behalf of the Canadian Manufacturers Association, British Columbia Division, we would ask you to realize fully that the present time in our opinion is not the time for such a drastic change in the industrial life of this province, more particularly so when an analysis of the annual report of the Department of Labor for the year ending December 31st, 1920, shows, that over 50% of those engaged in industry find it necessary to work over 48 hours a week.

Our province would be placed at a distinct disadvantage in competition with other provinces where similar industries are working longer hours. Our ability as manufacturers and producers to meet competition in foreign markets would be materially lessened if our hours of labour are much less than that of our competitors. The possible effect of creating an unemployment problem of magnitude must also be considered if through increased cost we cannot market our products, with a consequent resultant loss and suffering to both labor and capital.

All of which is respectfully submitted,

Yours truly,

(signed) Jas. B. Thomson,
Chairman, B. C. Division
Canadian Manufacturers Ass'n.

Expansion in "Morris Crane" Organization

The Herbert Morris Crane & Hoist Company, Limited, with Head Office and Factory at Niagara Falls, Ontario, have found it necessary to open a branch office in Hamilton, Ontario, to take care of their increasing business in that city and the surrounding district. F. C. Simpson is resident engineer in charge of the new branch, which is located at 512 York Street.

Users of Morris hoisting and conveying equipment and others wishing to develop more efficient and economical methods of handling their materials, are cordially invited to take full advantage of this latest addition to the service facilities of the Morris organization. They will find Mr. Simpson's knowledge of the Company's wide range of lifting and transporting apparatus of great value in dealing with any matter involving the shifting of materials.

Creosote Plant to Resume

After more than a year's inactivity the Canadian Creosote Company will resume operation of its Transcona plant next year at full capacity, W. E. Doan, director of the Company, announced Oct. 20th. This will give employment to 250 men, the plant having a capacity of 1,000,000 ties a year. Lionel O. P. Walsh of the Dominion Tar and Chemical Company, Montreal and Richard V. Look, Toronto, are with Mr. Doan.

The British Industries' Fair, 1922

An Opportunity for Canadian Manufacturers

THE first British Industries Fair was held in 1915, its objects being to promote the domestic manufacture of goods previously imported from enemy countries. Today this Fair is declared to be the greatest international trade fair in the world. It differs from the fairs at Leipzig and Lyons in that its exhibitors must be British, whereas the continental fairs named are international as regards their exhibitors. The 1921 Fair exceeded in the number of visitors the fairs of previous years. The demand for space in connection with the London exhibition use dupe very foot of space and 150 applicants could not be accommodated.

The Fair in 1922.

The eighth annual British Industries Fair which embraces a large number of the most important lines of British trade, will be held in London and Birmingham from 27th February to 10th March. This is purely a trade fair where buyer and seller meet, not an exhibition.

The British Industries Fair covers the following industries at London:—Cutlery; silver and electro-plate; jewellery, watches and clocks; hard haberdashery; glassware of all descriptions, china, earthenware and stoneware; paper; stationery and stationers' sundries and office appliances; printing, books; fancy goods, including travelling requisities and tobacconists' sundries; boots and shoes and shoe mercery; leather for the boot and shoe, fancy goods, bookbinding and upholstery trades; brushes and brooms; toys and games; sports goods (including sports clothing); scientific and optical instruments; medical and surgical instruments and appliances; spectacle ware and opticians' supplies; photographic and cinematographic apparatus and requisities; musical instruments; furniture of wood, cane, wicker; bedsteads and bedding; carpets, linoleum, etc.; basketware, chemicals, light and heavy; domestic chemical products; drugs and druggists' sundries; perfumery; dyes; food-stuffs (prepared and preserved) and beverages; confectionery (sugar and chocolate); tobacco, cigarettes and cigars.

At Bermingham—Lighting plant for electricity, gas, oil, etc.; cooking stoves and utensils, including aluminum, enamelware, etc.; foundry appliances; general hardware, including builders, marine and household ironmongery of all descriptions; general machinery of all descriptions and small tools; mill furnishings; india rubber goods for industrial and household purposes; motor cycles and cycles; accessories for motor cars, cycles and aeroplanes; weighing and measuring appliances and instruments; sanitary appliances; paints, colours and varnishes and painters' requisites; railway equipment; metals of all descriptions (excluding precious metals); agricultural and horticultural machinery and implements; mining, colliery and quarrying plant; brewing and distillery plant; metal furniture for house, shop, office, garden and camp use, including bedsteads; building construction; perambulators, mailcars and push-chairs; saddlery and harness; firearms; fishing tackle and rods; tubes in copper, lead, brass and steel and steam and pipe fittings; architectural and ornamental metal work, including gates and fencing; ropes of steel and hemp, cordage and string.

The London Section

The London Section of the Fair will, as in 1921, be housed in the White City, a large group of exhibition buildings within a few minutes of the centre of London, and connected with every part of the London area by trains, omnibuses and street cars, while the Birmingham Section will again be in the great buildings of the Castle Bromwich Aerodrome, which may now be regarded as permanent Exhibition buildings, within easy reach of the centre of the city. There is a floor area of more than 1,130,000 square feet which is admirably suited for the purpose, and it is interesting to note that the gangways between the stalls total no less than 3½ miles in length. Not only are both sections of the Fair in London and Birmingham in each instance under one roof, but the various trades are grouped in separate but adjoining buildings, thus saving the time of the buyer who will find side by side with well-known firms,

businesses of which he has probably never heard, but which are of equal interest.

Canadian Exhibitors.

Canadian manufacturers are not only entitled to exhibit at this Fair, but would also be welcomed, for the broad and wise view is that Great Britain's industrial, financial and political supremacy are dependent upon the perpetuation of imperial integrity.

The British Trade Commissioners in Canada will be pleased to give full particulars and to issue invitation cards to Canadian buyers who propose to visit the Fair at their following addresses:—248 St. James Street, Montreal; 260 Confederation Life Building, Toronto; 610 Electric Railway Chambers, Winnipeg.

New Brantford Company Organized

The organization is announced of the Ruddy Manufacturing Company, Limited, Brantford, Ontario, who are to take over on January 1st, 1922, the unit of the plant of Ham Brothers, Limited, in which are manufactured kitchen cabinets, woven wire mattresses and beekeepers' supplies.

There will be no interruption in manufacturing or selling due to the change in ownership, as the present well organized staff will be maintained, the only change being that Joseph Ruddy, now vice-president of the Canada Starch Company, Limited, becomes general manager of the new company. Ham Brothers, Limited, are taking a large financial interest in the new company and their president, John T. Ham, is one of the directors.

The other directors are:—Geo. S. Matthews, director, Canadian Packing Company, Limited; Fred W. Frank, secretary and manager, Brantford Water Works Commission; John S. Dowling, president, John S. Dowling and Company, Limited; George Wedlake, general manager, Cockshutt Plow Company, Limited; Chas. L. Messecar, president and general manager, Brantford Cordage Company, Limited; John R. Varry, director and manager, Slingsby Manufacturing Company, Limited; and Jas. J. Warren, president, Trust & Guarantee Company, Limited.



An Aerial View of the White City, London, where the British Industries Fair will be held

News and Views of the Association

There will be found each month in this department a record of the various activities of the Canadian Manufacturers Association during the preceding month. The information is supplied to INDUSTRIAL CANADA officially, and all members of the Association are urged to acquire the habit of reading and checking over the contents of the department carefully in order to keep themselves posted on the work of the Association

The Made-in-Canada Train for France

Views of Members of the Association

A VERY interesting feature of Association work during the past month has been the discussion of Senator Beaubien's project for sending a Made-in-Canada train on a tour of France. The Commercial Intelligence Committee and the Executive Council apparently felt that participation in the train exhibit and other notable features was a question for the individual member to decide and were unable to make concrete suggestions as to how the matter should be handled.

It is, therefore, a great compliment to the boundless energy and enthusiasm of Senator Beaubien, who was chiefly responsible for the success obtained by the French train that recently toured Canada, that two special and lengthy circulars have been issued to all interested members, the first putting before the members the aims and objects of the tour, outlining the advantages to be derived from general participation in it; the second being a letter from Senator Beaubien throwing various sidelights on the previous circulars and suggesting means of reducing the cost to individual exhibitors.

Many Members Approve

The replies so far received indicate that many of the members approve of the idea of sending a train. However, many are prevented from active participation, some because they feel that there is no market for their goods in France, others because their export trade to France is conducted from some affiliated plant or warehouse outside Canada, and still others because the bulky nature of the goods they handle prevents them from being shown to advantage in a small space.

The manufacturers who suggest that they are prepared to send exhibits are engaged in the following businesses:—Brass castings, cordage, canoes, roofing, concrete machinery, asbestos, dried fruit, staves, woodenware, pianos, organs, linseed oil, canned goods, rubber goods, fish, wrenches.

Differences of opinion are made evident by the correspondence that the circulars have produced. Time did not permit of getting the consent of correspondents to use their names, but the following letters from members are published showing the grounds for their views:—

"Replying to your enquiry in reference to the Made-in-Canada Train for France, we beg to say that we would be much in favour of the project.

"We are willing to prepare an exhibit and have a qualified representative to negotiate business arrangements in France.

"Hoping that the Canadian Government will take advantage of this opportunity of

having the Canadian products presented to the French buyers, we beg to remain."

Would Send Exhibit

"We are in receipt of your favor of November 12th in regard to a "Made-in-Canada Train" for France.

"First:—We are in favor of sending a "Made-in-Canada Train" to tour France.

"Second:—We are prepared to supply an exhibit of our materials.

"We do not think, however, it would be possible to send a representative."

Glad to Co-operate

"Your circular of 12th. regarding exhibits in France received. We would be glad to supply an exhibit of our goods covering a variety of lines in which we are interested financially. We do not think we would care to send a representative to look after these samples from Canada, but we have agents in Paris and Havre from whom we could obtain a man that would represent us and look after the exhibit. It this would be agreeable you might let us know how much space we would be permitted to occupy, and as I understand it the only expense to us would be the services of our representative."

A Grand Opportunity

"Replying to your circular letter of the 12th instant, beg to say that we would be very much interested in sending a "Made-in-Canada" train to tour France. We will also be pleased to prepare one, two or three sample canoes as an exhibit.

"We could not, however, send a representative with the goods, but we believe we could arrange with some one in Paris who would keep an eye on the exhibit during the period of six months, when in some building in the City of Paris. We presume it would not be necessary to have the goods returned to Canada again, it could be arranged to have someone take delivery of them after the exhibition was over.

"We think this would be a grand opportunity for the manufacturers of Canada to introduce their goods, and we have no doubt but that big results will follow."

Probably Make Exhibit

"Answering your letter of the "Made-in-Canada Train for France": we wish to place ourselves on record as being in favor of this train and would probably make an exhibit if other paper manufacturers could be interested. With this end in view we would refer you to Mr. Beck, Secretary of the Pulp and Paper Association of Canada, Drummond

Building, Montreal, and we think it as well for you to take up with him the matter of getting Canadian manufacturers of paper jointly interested."

Could Not Exhibit

"With reference to your letter of November the 12th re Made-in-Canada Train for France, beg to state that we are very much in favor of sending this train to tour France, but we are not in a position to prepare an exhibit, as the products which we manufacture are butter and ice cream. We however heartily endorse the idea."

Criticism of Project

"Yours of the 12th, regarding "Made in Canada" train for France, received.

"While I do not feel competent to express any final judgment in this matter, as I was one of the 35 or so Canadian manufacturers who went to France early in 1919 and exhibited at Lyons, and as I have been more or less in touch with other exhibitors, as well as our own experience since, I think it might be worth while to make one or two observations, other than the answers "yes" or "no" to your two questions.

"First, in regard to the questions. I would state in No. 1 that in the light of all of the experience that I had and my knowledge of the experience other manufacturers who went to France and in the light of present conditions, including the exchange situation, I would answer quite positively that I do not favor the sending of such a train.

"Second, in the light of the same knowledge which made any further effort inadvisable on the part of our industry, over two years ago, and in view of the fact that conditions are decidedly less favorable to-day rather than more so, there would be nothing whatever to justify our going to expense and effort to exhibit ourselves in such a train.

"What value there might be to such an effort in the way of natural or agricultural products, or in the way of nationally advertising Canada, with a view to immigration or with some other object in view, I cannot say, but from a manufacturing standpoint I believe it would be the case that of all those who attended the Lyons Fair, many immediately realized that although the handicap in regard to doing trade in France might not be absolutely insurmountable, that there were so many other fields offering so much better avenues for trade, as to lead to a decision to abandon any effort in this direction immediately. Others, as I understand it, made what appeared to be attractive beginnings for trade, at the time of said Lyons' Fair, but have since largely abandoned this field. There may have been two or three concerns, possibly harvesting machinery or something like that, who are still doing trade over there, but I understand that there was not a single exhibit from Canada at the Lyons Fair this last year. It would seem to me to be interesting for you to note particularly the replies

that you obtain from those who were at the Lyons Fair in 1919, and I shall be greatly surprised if there isn't a practical unanimity of opinion from these people that the effort would not be warranted.

"The outstanding difficulties that seem to be in the way are—first, of course, the very much aggravated exchange situation, which does not promise to right itself in the anywhere near immediate future; second, a very pronounced disposition on the part of the French people as a whole to give the preference even at some sacrifice to French products, it being our experience over there that this preference almost amounted to a prejudice with antipathy towards the foreign products.

"If such a train were being promoted for the British Isles, it would, I believe, find much greater justification in the way of prospects of opening up business channels than for France.

"The main proof of the pudding of course will be the number of manufacturers who express a willingness to exhibit over there. Possibly, you will receive more favorable replies along this line, than I anticipate. But, even if you do, there is still a question to be considered carefully by the C. M. A. namely, that although the writer was not among them, there was quite a disposition on the part of a good many of the manufacturers who went to Lyons Fair to hold the Department of Trade and Commerce and the C. M. A. itself, responsible for having led them into "a wild goose chase", without proper investigation in the first place as to whether there was reasonable chances of returns on such an effort. Personally, I felt that it was up to our own firm to take such chances and make such investigation in the main, but nonetheless, I can quite conceive that the C. M. A. might stand to lose a good deal more than they could gain by such an enterprise, unless conditions have changed very materially for the better, over what they seemed to be to us when we made our visit in 1919, and if anything the trend seems to be in the opposite direction."

Senator Beaubien's additional letter has been forwarded in order that members who had not heretofore replied might do so with the new light before them, and in order that those who had replied in the negative would have the opportunity of reviewing the situation.

Future of the Western Colonization Association.

M. A. Brown, Medicine Hat, who, since the resignation of General McRae, has been acting as general manager of the Western Canada Colonization Association, has desired the rumor that he is resigning from that Association. He has simply expressed his inability to accept the office of general manager permanently. As some of the members of the C. M. A. are interested in the work of this Association, they will note the following remarks of Mr. Brown with regard to the future of the Colonization Association, with interest,—

It must be frankly admitted that the association faces serious difficulties arising out of widespread financial conditions over which we have no control. But that is only an additional reason for a fresh effort on the part of all others who see in increased population on the land the surest road to a return of national prosperity. Canada needs, as never before, an association of business men prepared to bend every energy to the improvement of agricultural conditions in the West, and to assist Governments and other

colonization agencies in the intelligent settlement of the vacant lands along the railways."

Proposed Eight Hour Day Legislation in British Columbia

At the session of the British Columbia Legislature in the spring of 1921, there was passed, for the purpose of implementing the terms of the Versailles Treaty, a bill providing for the establishment in practically all



Fred R. Whittall
Managing Director, A. R. Whittall Can. Co., Ltd.
Montreal.
Chairman of the Export Club of Montreal and District.

of the industries in the province a uniform eight-hour day, this bill carrying the important proviso, however, that it should only come into force concurrently with or after the adoption of similar legislation by other provinces in Canada.

At the session which convened on October 17th, an amendment to the above-mentioned act was introduced, which, if passed, would have the effect of bringing the original act into force on May 1st, 1922. The effect on the lumbering, fish packing, fruit and vegetable canning and numerous other industries of such an action by the government would have been very serious, and on behalf of its membership, the B. C. Division prepared and submitted to the Provincial Cabinet and to all of the members of the Legislature a strong memorandum. (See page 63.)

A number of the members of the House have expressed themselves as opposed to the idea of inflicting such legislation on British Columbia manufacturers when their competitors in the neighboring provinces and states are not bound by any such restrictions, and it is hoped that, following the debate on the proposed amendment which is in progress in the Legislature at the time of writing, the attempt to bring an eight-hour day into effect next year will be defeated.

The Shipment of Liquor

A bomb shell was thrown into the camp of the brewers of Quebec a short time ago when an order was issued by the Deputy Director of Customs at Washington D. C. instructing customs officials to hold up all shipments of alcoholic liquors passing through the United States from Canada in bond for export.

Although the order, 48 hours later, was held by the Washington officials to have been mis-construed by the customs officials, there nevertheless existed for that length of time a virtual embargo on the exportation of liquors from Canada in bond for export.

Objections came to the local office from Quebec manufacturers and in some cases the Montreal office assisted in securing the return liquor to provincial points of manufacture which had reached the border concurrently with the receipt of the order banning its transit.

Head office was called in on the case and soon were active with the Association representative in Washington. Railway officials asked the co-operation of the Association in the effort with the result that ere long the order was properly construed and Canadian shipments went forward without further interference. This was one outstanding case in which the Association's services were used to their fullest extent by the manufacturers concerned and it is needless to add that these services were not without appreciation.

Mayor Parnell Re-elected

A tribute to the sterling worth of Edward Parnell, mayor of Winnipeg for the past year, was paid him by the people of Winnipeg on November 11, when he was re-elected to office by acclamation. The Executive Committee of the Winnipeg Branch, of which Mr. Parnell has long been a valued member passed a resolution at its November meeting, congratulating him and promising him the support of the membership.

The Vote of Corporations

The attention of members is called to the provision of Section 265 of the Municipal Act empowering corporations owning land in a municipality to appoint one nominee each to vote on money by-laws. A corporation which wishes to exercise this right must, not later than the 10th day before the date of voting, file with the clerk of the municipality an appointment in writing of person to vote as its nominee. There is no restriction as to whom a corporation may appoint as its nominee.

All our members in Ontario Division have been circularized by our Legal Department accordingly.

Toronto Branch Gives Scholarships

The annual commencement of the Toronto Technical Schools was held in the Auditorium of the Central Technical School on the evening of Friday, Nov. 18th. In the absence of Dr. A. C. McKay, on account of illness, W. C. Coulter, Chairman of the Advisory Industrial Committee, occupied the Chair.

J. M. Warren, first assistant principal of the day schools, delivered a short address showing what the school had done in the great war. He explained that from the first, many of the old boys and many of the boys still in attendance, answered the call, and as the war went on, and as the need became greater, members of the staff and more and more

boys enlisted so that the senior day classes practically vanished, until there was not left the name of a boy of military age and physical fitness on the registers of the School.

The dedication in simple but effective form of a memorial organ to students who fell in the great war, next took place.

After the ceremony, the diplomas and certificates were presented by Mr. W. E. Groves, Chairman of the Management Committee of the Board of Education.

56 scholarships totalling \$1400 were presented by W. C. Coulter, representing the Toronto Branch of the C. M. A. in addition to \$200 given by Toronto Branch as prizes to the evening school. The following is a list of the \$25 scholarships donated by the manufacturers for the year 1921,—

Name of Donor	Scholarship	Am't.
Anthes Foundry, Ltd.	2	\$ 50
Ault & Wiborg Co. of Canada, Ltd.	1	25
Brigdens, Ltd.	1	25
Booth Coulter Copper & Brass Co., Ltd.	1	25
Boeckh Bros., Ltd.	1	25
British American Oil Co., Ltd.	2	50
Brown Bros., Ltd.	1	25
Christie, Brown & Co., Ltd.	1	25
Canadian Wm. A. Rogers Co., Ltd.	1	25
Canadian Kodak Co., Ltd.	1	25
Consumers' Gas Co. of Toronto, Ltd.	1	25
	56	\$1400

Consolidated Optical Co., Ltd.	2	50
Cream, Robert Co., Ltd.	2	50
Dunlop Tire & Rubber Goods Co., Ltd.	2	50
Davies, Wm. Co., Ltd.	1	25
Dominion Radiator, Co., Ltd.	1	25
Eaton, T. Co., Ltd.	2	50
Ellis, John F. (Barber Ellis, Ltd.)	1	25
Freysend, Ed. J.	1	25
Fletcher Mfg. Co., Ltd.	1	25
Graves, Bigwood, Co. Ltd.	1	25
Gutta, Percha & Rubber Ltd.	1	25
Hamilton Carhartt Cotton Mills.	1	25
Imperial Varnish & Color Co., Ltd.	1	25
Lever Bros., Ltd.	1	25
Laidlaw, R. Lumber Co., Ltd.	1	25
Lowndes Co., Ltd.	1	25
L'Air Liquide Society	1	25
Massey Harris Co., Ltd.	2	50
McGregor & McIntyre, Ltd.	1	25
Northway, John & Son, Ltd.	1	25
O'Neill, John	1	25
Rous & Mann, Ltd.	1	25
Rolph, Clark, Stone, Ltd.	1	25
Robertson Bros., Ltd.	1	25
Stauntons, Ltd.	1	25
Steel Co. of Canada, Ltd.	1	25
Smith, Howard Paper Mills, Ltd.	1	25
Southam Press, Ltd.	1	25
Standard Saw & Mfg. Co. Ltd.	2	50
Roden Bros. Ltd.	1	25
Toronto Carpet Mfg. Co., Ltd.	1	25
Taylor, J. & J. Ltd.	1	25
Toronto Hardware Mfg. Co.	1	25
Williams, A. R. Machinery Co., Ltd.	1	25
Wanless, John Co.	1	25
Wickett & Craig, Ltd.	1	25
Wallace, H. J. (J. Coulter Co., Ltd.)	1	25

were equally divided as to the validity of these acts, and did not render judgment thereon, but by consent, referred them to the Privy Council.

The Law Lords confirming the view originally maintained by our Legal Department, held that these statutes involved the property and civil rights of the inhabitants of the Provinces, subjects which are under the exclusive jurisdiction of the provincial legislatures. Lord Haldane, who delivered the judgment, observed that the law was not one enacted to meet special war-time conditions but was passed in 1919 after peace had been declared, and was not confined to any temporary purpose but was to continue without any time limit, and was to apply to the whole of Canada. His Lordship proceeded that it could be only under highly exceptional necessity such as could not be assumed to exist in the present case, that the liberty of the inhabitants of the provinces might be so restricted by the Canadian Parliament, and their Lordships did not find any evidence that the standard of necessity referred to had been reached or that attainment of the end sought was practicable, in view of the distribution of legislative powers enacted by the Constitution Act, (the B. N. A.) without the co-operation of the provincial legislation.

Their Lordships presumed that it may be within the power of the Dominion to call for statistical and other information which may be valuable for guidance in questions affecting Canada as a whole, but that even this consideration affords no justification for interpreting the words of Section 91 of the B. N. A. in a fashion which would make them confer a capacity to regulate particular trades and businesses.

Recent Publications

332. November 17, 1921.—Circular letter to the membership, issued by the Tariff Department, enclosing copy of amended custom regulations governing administration of the act respecting the marking of country of origin on goods imported into Canada.

Ontario Division

9. November, 22, 1921—Circular letter with regard to proposal of Public Service Commission of Ontario to make compulsory registration of manufacturers' liens.

The Late Board of Commerce

BY H. MAC DONALD,

Legal Secretary, C. M. A.

THE Privy Council gave judgment on November 11th on the Canadian Board of Commerce Act and the Combines and Fair Prices Act, passed in 1919, finding that they were ultra vires of the Dominion Parliament.

It will be recalled that pursuant to a recommendation of the Committee appointed to inquire into the high cost of living, the Canadian Parliament in the 1919 session passed an act creating a Board of Commerce to consist of three commissioners, each appointed by the Governor-in-Council for a term of ten years, their whole time to be devoted to the duties of their office. The Board was charged with the general administration of the Combines and Fair Prices Act, 1919, which was enacted to provide machinery for the investigation and restraint of so-called combines and to restrain the enhancement of prices of commodities.

The fact that the Board of Commerce had been constituted a Court to deal with the matters covered by the Combines and Fair Prices Act, 1919, indicated that the matters proposed to be dealt with were not regarded by Parliament as matters of criminal law, for if they were matters of Criminal law, the constitution of the Court, which was to deal with the matters, could not have been provided for by the Dominion Parliament. Further, what constituted criminal law must be ascertained by reference to what was so considered at the time the B. N. A. Act was passed.

Our Legal Department at once advised that the provisions of the Combines and Fair Prices Act, 1919, and of the Board of Commerce Act involved a fundamental interference with the right of property, and with the right to enter into contracts respecting property, and in essence, involved the destruction of the principle of private property and was thus a violent and flagrant invasion of property and civil rights in each and every Province in which such an interference might be attempted; and also that the fundamental character of the right of an owner to fix a price at which he will sell his goods and enter into contracts was struck at and abolished, and involved, in principle, the direct and serious impairment

of the rights in each Province arising under the system of private property then and now recognized by the laws of all the Provinces of Canada. In effect the Dominion Parliament presumes to confer greater authority on the Board of Commerce than it possessed under the provisions of the B. N. A. Constitution Act.

So strong was the sentiment against the administration of the Board of Commerce that the Board submitted a stated case to the Supreme Court of Canada to determine whether in fact Parliament had power to create the Board of Commerce. A copy of the stated case being served on the C. M. A., our Legal Department instructed W. N. Tilley, K. C. as special counsel, to represent the Association on the argument.

Six judges of the Supreme Court of Canada



A Clever Display at a Fall Fair

William Cane & Sons Co., Limited, manufacture Made-in-Canada lead pencils at Newmarket, Ont. When the local exhibition was held this fall, they arranged a display of their products which was quite one of the most interesting features of the fair. The huge Union Jack in the background was built up entirely of their lead pencils.

News of the Month from Maritime Division

Headquarters of Division—Amherst, Nova Scotia

Chairman.....	L. W. Simms, T. S. Simms & Co., Ltd., St. John, N.B.
Vice-Chairmen.....	C. S. Sutherland, Amherst Boot and Shoe Co., Ltd., Amherst. J. A. Marven, J. A. Marven, Limited, Moncton, N.B. J. E. McLurg, Halifax Shipyards, Limited, Halifax, N.S.
Secretary.....	H. R. Thompson, Box 470, Amherst, N.S.

THE proprietors of the offices which have been used at Amherst, N. S. for the headquarters of the Maritime Division, require these offices for their own use and it has been necessary for the Secretary to procure others. The new offices are located at No. 10 Lawrence Street, about three minutes walk from the railway station and one minute from the main street. The suite comprises three offices on the ground floor and totals over 600 square feet of office space. The old offices were entirely too small for the purpose and the additional space in the new offices will afford better facilities. The Secretary would appreciate having the members call on him when in town.

Maritime Canned Fish Section

The annual general meeting of the Maritime Canned Fish Section was held in Amherst, Nova Scotia, on the afternoon of November 16th. The election of officers for the coming year resulted as follows:—

F. Magee, Chairman.
R. H. Williams; Vice-Chairman.
H. R. Thompson; Secty-Treas.
W. F. Tidmarsh; Director, P. E. I.
R. O'Leary; Director, N. B.
J. A. Neville; Director, N. S.

Sales Tax

A number of the members of the Section pointed out what appear to be inconsistencies in the enforcement of the sales tax in so far as it affects the canned lobster industry.

The interpretation and enforcement of the provisions of the Act in the various sections of the Maritime Provinces are so widely different that some packers and receivers escape the tax, while others are forced to pay. In justice to all, the regulations should be similarly treated everywhere. In view, however, of the small quantities sold locally, and owing to the multiplicity of the factories and the natural complications making the collection costs exceed the returns, it was felt that this Association should ask the Minister of Finance to exempt canned lobsters from subjection to the sales tax.

It is estimated that the gross annual receipts therefrom would not exceed a total of \$6,000 because the bulk of the canned lobsters packed are exported from the Dominion and less than 10% sold in Canada. The payment of the tax on receiving same from the factories and the collection of the drawback after exportation, renders many complications, especially since there are over 600 factories engaged in producing these goods, and most of these factories, for financial or other reasons, make daily or weekly shipments to the exporters, so that the revenue from these collections would prove entirely inadequate in comparison with the cost, to the Government, of the collection.

The Secretary was instructed to secure full information and endeavor to have some adjustment made in regard to the enforcement of the tax as it applies to this particular industry.

Discoloration in Canned Lobsters

Perhaps the greatest problem in connection with the canning of lobsters is to prevent what is usually termed discoloration. This difficulty has appeared to a sufficient extent to warrant a thorough investigation in an endeavor to ascertain the actual causes and devise means to prevent same. There are

two principal factors which will have to be the subject of enquiry, namely, the bacterial and the chemical. The Biological Board of Canada has instituted research work in connection with the bacterial phase and some progress has been made in this connection. It is felt that this trouble can be largely overcome by maintaining proper sanitary conditions throughout the various operations from the catching of the fish to the sealing of the cans. Officials of the Biological Board are conducting an educational campaign in this regard and officers are visiting the lobster factories in an endeavor to impress upon the operators the necessity for instituting and maintaining proper methods and conditions.

The chemical difficulty is caused by the action of the chemicals in the meat and preservative liquid coming in contact with the can, and is somewhat harder to overcome. The Industrial Research Council is now working on this problem and although a definite solution can not yet be announced, certain progress is being made.

In the above connection the following two Resolutions were adopted:—

"RESOLVED that the Maritime Canned Fish Section of the Canadian Manufacturers Association, in annual convention assembled, desires to place on record its appreciation of the work undertaken by the Marine and Fisheries Department, acting through the Biological Board of Canada, in applying scientific research to the lobster canning industry, and respectfully requests that the work of investigation and education be enlarged and continued until the causes that lead up to the economic losses that the industry has had to bear through the entire period of its existence, are determined, and the difficulties overcome.

"FURTHER RESOLVED that this Association desires to express its thanks to Mr. W. A. Found, Assistant Deputy Minister of Marine and Fisheries, and Dr. A. P. Knight, President of the Biological Board of Canada, for the interest they have taken in instituting and carrying on the work of research and education."

"RESOLVED that the Maritime Canned Fish Section of the Canadian Manufacturers Association, in annual convention assembled, desires to place on record its appreciation of the work of investigation carried on during the lobster canning season of this year, by Dr. F. C. Harrison, under the auspices of the Research Council of Canada, for the purpose of determining the causes of deterioration in canned lobsters and for the discovery of a means of preventing the same by scientific methods, and do urge upon the Research Council to continue the experiments until a final solution is arrived at, so as to relieve the industry of the economic waste that has been going on for the entire period of its existence."

Fishing Seasons.

Contrary to the advice of the officers in the outside service of the Department of Fisheries, the lobster season in the district from west of Halifax Harbor to St. Mary's Bay has been extended. This matter came up for discussion and resulted in the adoption of the following resolution:—

"RESOLVED that this meeting expresses its regret that the Department of Marine and Fisheries has been forced, through present exigencies to grant an extra six weeks lobster season in the districts of Nova Scotia west of Halifax."

It is unfortunate that this was done, because it will not, so far as can be judged now, be of any material benefit to the fisherman, packers, or shippers on that part of the Coast.

The regulations made as a result of the conference of August 1918, between the Department and those commercially interested in the lobster industry, were formed as a concession between the Government's desire to shorten the seasons and the trade who wished it to remain upon a remunerative basis for all concerned. After three years' trial, the seasons then imposed have been found to have given more general satisfaction than all previous regulations, though there are still minor instances of local hardships.

Now that this concession has been granted to one section, it is feared all districts will be appealing for changes in their fishing dates, extensions or extra fishing seasons.

The disastrous effect of the present season upon the conservation of the lobster is bound to be bad and so too will all further concessions of this nature injure the future of the catch and the stability of the demand for both the live and canned products.

We again appeal to the Governments that the seasons as made in the Fall of 1918 be made statutory so that the industry may not suffer by the constant changes advocated by those who wish to take advantage of every new situation that arises."

Application has been made to the Section for co-operation in having changes made in the fishing season from West Point to Victoria, P. E. I. and after exhaustive discussion, the following Resolution was passed:

"RESOLVED that it is the opinion of this Convention, that if, after scientific investigation, it is ascertained that lobsters are in fit condition for canning, that Season No. 7 be changed so as to permit fishing and canning from the first day of August until the 30th day of September in each year, and that the Marine Department is hereby respectfully requested to have this matter investigated during the Season of 1922."

Standardization of Shipping Boxes.

The question of the desirability of standardizing the sizes of shipping boxes and box shooks used in connection with the Canned Lobster Industry came up for discussion and it was the general opinion that action should be taken towards this end. It was suggested that the Chairman and Secretary draft up a memorandum of proposed specification and submit same to the members of the Section for their comments. From these they could probably work out dimensions which would be suitable to a majority. These sizes could then be standardized and an effort made to get the others to adopt them.

Retorts.

There is a possibility that quite a number of retorts will be required in the next few years and the suggestion was made that a specification be made up for a standard retort and that efforts be made to have these manufactured locally. The Chairman and Secretary were requested to give this matter their attention.

Expression of Appreciation.

The Chairman expressed the appreciation of the Section in having the pleasure of Mr. Ward Fisher's attendance at the meeting and for the co-operation of the Department of Fisheries as evidenced thereby. The expression of appreciation was reciprocated by Mr. Fisher who took the occasion to thank the Section for the invitation to be present. He stated that the Department was endeavoring to work in the best interests of the industry and wished to establish close relations with those engaged in the industry. It was his opinion that it will only be through the co-operation of all, that the utmost can be done to efficiently conserve and develop the industry.

This Month's Activities in Quebec Division

Headquarters of Division—113 Board of Trade Building, Montreal

Chairman.....J. H. Fortier, P. T. Legare, Ltd., Quebec.
Vice-Chairman.....F. W. Stewart, Cluett, Peabody & Co., of Canada, Ltd., Montreal.
Secretary.....R. W. Gould.

A VERY full and comprehensive discussion on railway rates and the marking of goods act took place at the last meeting of the Montreal Branch executive in the Montreal Club on November 9th.

For the railway freight rate discussion J. E. Walsh, general manager and S. B. Brown assistant manager of the Transportation Department were present bearing full explanations as to detailed proposals; and for the marking of goods act discussion, J. R. K. Bristol, manager of the tariff department, covered the ground thoroughly and comprehensively.

The members of the Montreal Executive had an opportunity also of welcoming F. E. Mutton, a member of the Ontario Division executive who happened to be in the city on this occasion.

The report of the Municipal Affairs Committee by its chairman, Michael Hirsch was adopted without amendment. Important among its contents was the concurrence of that body in a movement under way to urge upon the government to amend the provincial statutes so as to permit corporations and municipalities to exempt from taxation, at their pleasure and with the permission of the Minister of Municipal Affairs any industry intending to locate in the province of Quebec, provided this was an added inducement.

It was pointed out in the report by the real estate board of the Montreal Board of Trade that Ontario now had this privilege and the fact that Quebec municipalities were prevented by law from making such concessions had militated against Quebec's chances in the securing of new industries and to the advantage of the sister province of Ontario. The Montreal Branch decided to concur in this action with the real estate board of the Montreal Board of Trade. R. Montague Davy was named the representative of the Montreal Branch on the joint committee being formed to interview the provincial government in the matter.

J. E. Walsh, general manager, addressed the meeting briefly in the matter of railway freight rates and the outlook for a reduction in freight tariffs. Much valuable information was received and the general manager met a bombardment of questions from members of the executive committee.

The question of the marking of goods act excited quite a discussion which was prefaced by an address by J. R. K. Bristol, head of the tariff department, who traced the act from its inception up to its present state. Many manufacturers held incorrect views of the application of the act and the intentions of the Customs Department in this matter. It was pointed out by Mr. Bristol that similar acts were in force in many industrial countries throughout the world.

Many questions followed Mr. Bristol's address and those who either had what they believed to be grievances or hardships under the act or had had such quoted to them by importing manufacturers had their questions answered. To digress for a moment from the report of the meeting it may be pointed out that many of the earlier objections to the act coming from this district have disappeared with a better understanding of its provisions.

A resolution was passed to the effect that the executive of the Montreal Branch wished to go on record as being in favor of the act as at present proposed and passed, providing always that it be intelligently and logically applied.

Other matters of lesser importance were discussed before adjournment. There were present B. W. Coghlin in the chair, together with F. H. Hopkins, W. R. Granger, Art Harries, H. T. Diplock, John Irwin, Fred R. Whittall, P. E. Joubert, Michael Hirsch, R. Montague Davy, A. D. Huff, J. R. K. Bristol, J. E. Walsh, F. E. Mutton, (Toronto), P. F. Sise, S. F. Rutherford, Joseph Beaubien, S. B. Brown and the secretary.

Export Club Formed

The Export Club of Montreal and District came officially into being on Wednesday night, November 23rd in the Ladies' Ordinary of the Windsor Hotel, here. The mere fact that a club has been formed for this district does not indicate to those who are outside the pale of the original organization committee, the vast amount of work these gentlemen did in order that all details might be properly completed.

This committee headed by B. W. Coghlin, as chairman, who by the way is chairman of the Montreal Branch in the Quebec Division, did yeoman work in the preliminary details.

The other members of the committee were F. R. Whittall of the Whittall Can Company who has been elected president of the club J. A. Lapres and W. A. Toohey of the Canada Cement Co.; A. D. Huff of Riordon Pulp and Paper Co. and R. W. Ashcroft of the Ames Holden McCready Co. Although not officially on the committee T. P. Howard of the Howard Smith Paper Mills and an ex-president of the Association, by the special request of the committee, attended the meetings of the committee, more than six in all, and was of the greatest possible assistance with his advice and mature knowledge of Association affairs.

The meeting was well attended. At the outset F. R. Whittall, who occupied the chair, explained along broad lines the purposes of the Club while association officials followed in detail. A slate for an executive committee was presented to the meeting and passed without amendment or opposition.

The officials and executive committee of the Export Club of Montreal and district stand as follows:—

Hon. President: T. P. Howard, Howard Smith Paper Mills, Limited.

President, F. R. Whittall, Whittall Can Co.

Vice Presidents, Kenneth Dawes, National Breweries and J. A. Lapres, Canada Cement Company.

Executive Committee: A. D. Huff, Riordon Pulp and Paper Co.; S. A. Gettus, Steel Company of Canada; Arnold C. Moore, Lake of the Woods Milling Co.; R. W. Ashcroft, Ames Holden McCready Co.; G. R. Bonariel, Canadian Consolidated Rubber Co.; W. C. Trotter, Standard Clay Products Co., St. Johns, Que.; H. Clark, Wm. Clark Limited; J. Bruce Payne, Canadian Grown Tobacco Co., Granby, Que.; V. G. Bartram, Canada Carbide Co., A. S. Ginger, Howard Smith Paper Mills. D. R. Arnold, Canadian Car and Foundry Co. and W. S. McLennan, Brandram-Henderson, Limited.

Secretary,—R. W. Gould.

H. R. Pousette, director of Commercial Intelligence of the Department of Trade and Commerce, was the chief speaker of the evening. In opening he congratulated those present upon the formation of such a sturdy

club and expressed the opinion that organizations of this kind formed throughout Canada would do much and go a long way toward boosting the export trade of the country. He made several suggestions whereby the club could co-operate with his department and promised the entire co-operation of that department with the club.

The speaker took the opportunity to explain the services and the functions of the Commercial Intelligence Department and it may be truthfully stated that many present had no idea of the scope of the activities of this department until this time. Mr. Pousette expressed his opinion that lack of knowledge on these points was explanatory of the fact that the business people of Canada did not use the department as much as they might for their own good.

Following Mr. Pousette's address the meeting was thrown open for general discussion and many questions were asked relative to the club and details of the matters presented by the speaker. Quite an encouraging representation from manufacturing centres outside the city of Montreal was present and joined heartily in the business of the meeting.

A great many business people not manufacturers in the province of Quebec, including transportation officials, financial men, insurance companies and importing and exporting companies are urging the Club to attempt to formulate some scheme whereby business men other than manufacturers may be represented in full membership in the club. The executive will take up this question in the near future in an effort to bring about some satisfactory solution.

Workmen's Compensation

Within the next fortnight there will doubtless sit in Montreal a conference unique in the history of provincial legislation in Canada. This conference will have to do with the proposed amendment of the Workmen's Compensation Act of the Province of Quebec.

Arrangements are almost completed for representatives of the International Unions and representatives of the National Catholic Unions in the province to confer with a special committee of the Quebec Division of the Canadian Manufacturers Association.

During the past few months a special committee composed of Julian C. Smith (Chairman), T. P. Howard, R. H. McMaster and W. S. Atwood have been studying the legislation of the province in the matter of the Workmen's Compensation Act and have now so completely familiarized themselves with existing legislation and existing conditions as to be prepared to meet labor and discuss the formulation of amendments to the present act that will be acceptable to all three parties to the conference. It is hoped that when the legislature sits on January 10th at Quebec, a comprehensive scheme of amendment will have been formulated and presented by the joint conference to the government of the province.

New Members

New members added to the Association in the Quebec Division during the month were:—

La Cie. D'Enterprises Generales du Lac St. Jean, Ltd., Chicoutimi.

Acadia Sugar Refineries, Montreal.

Canadian Vickers Limited, Montreal.

Acton Shoe Company, Actonville, P. Q.

The monthly meeting of the executive committee of the Quebec Division was held in the Chateau Frontenac Quebec at noon on November 30th. This was the first gathering of the Association of any size in Quebec city since the annual convention in June last.

Ontario Division's Activities for the Month

Headquarters of Division, Bank of Hamilton Building, Toronto

Chairman.....W. C. Coulter, Booth-Coulter Copper and Brass Co., Ltd., Toronto.
Vice-Chairman.....A. W. White, Geo. White & Sons Co., Ltd., London.
Secretary.....H. Macdonald. Travelling Secretary.....O. C. Pease.

THE manufacturers of Galt had a splendid meeting in that city on November 23rd., which was presided over by Col. A. J. Oliver, of the R. McDougall Co. Ltd., and attended by representatives of most of the important companies in the city.

Col. Oliver, in his opening remarks, stated that seventy-one Galt manufacturers had exhibited at the local Exposition during the period from November 12th to 19th., and that never before in the industrial history of Galt has such a co-operative spirit been manifested among the city's manufacturers. "It seems a shame," Col. Oliver said, "that we should lose the 'get-together' spirit which we have worked up during the course of the Exposition. Most of us, from time to time, have spoken of the advisability of forming a branch of the Canadian Manufacturers Association in Galt. In consequence of this I have asked Mr. H. Macdonald, the secretary of the Ontario Division to outline to us this evening the steps it would be necessary for us to take in carrying out such action."

Mr. Macdonald then stated that he and Mr. O. C. Pease, travelling secretary for Ontario, had come to Galt at the request of Col. Oliver to give whatever information and assistance the Association could offer towards the formation of the Galt Branch. For the benefit of non-members of the Association who might be present, Mr. Macdonald outlined the organization and scope of the Association as a whole. He covered quite fully the work of the individual Departments, and illustrated the methods by which members are kept in touch with industrial problems in Canada.

Mr. Macdonald then dealt with the many advantages to be derived from a Branch of the Association in Galt. He suggested an elastic organization upon which tension could be slackened entirely when there was no particular call for concerted action, but which could be tightened up at a moment's notice when civic, provincial or national problems arose which might call for co-operative action. The Branches at Hamilton, Kitchener and other points were cited as instances pointing to the value of an organization of this type, and he sketched, as well, the various actions of the Toronto Branch as concerned with the Hydro Commission regarding the use of Toronto streets, the Harbour Board and civic unemployment.—such actions being indicative of the course which might be followed by Galt Manufacturers under similar circumstances.

Col. Oliver then called for expressions of opinion from among those present.

Mr. Goldie concurred heartily with the idea of forming a branch, and stated that in his opinion the present was a most opportune time.

Mr. Hamilton stated that he had not appreciated the value of the work performed by the Association before Mr. Macdonald spoke, and said that he was altogether in favour of establishing a branch in Galt.

Mr. Stauffer expressed his approval of the C.M.A. idea, and Mr. Steve Clark, who termed himself a believer in organizations, added his endorsement. Mr. Bassett believed that in union there was strength and agreed to the suggestion, as did also Mr. McLaughlin and Mr. Schrieber. Mr. Cowan stated that the city had proved its co-operative ability during the Exposition, and urged that the spirit be maintained. A number of other gentlemen spoke in a similar strain.

Mr. Geo. A. Dobbie, calling particular attention to the fact that Galt manufacturers were faced with the efforts of opposing organizations which could only be successfully contended with through affiliation with the C.M.A.

Col. Oliver then asked if there were any manufacturers present who were opposed to the formation of a Galt Branch of the Association, and there was no response. The suggestion having then passed by acclamation, it was proposed by Mr. Hamilton and seconded by Mr. Roelston that Col. Oliver should be elected as chairman of the manufacturers' meeting. It was proposed by Mr. Dobbie and seconded by Mr. Dietrich, that Mr. Beverley H. Neill act as secretary.

The following gentlemen were elected as an organizing committee to prepare a slate of officers and committee and to arrange for a further organization meeting of a social nature which would witness the inauguration of the Galt Branch.—Col. A. J. Oliver, R. M. Hamilton, W. G. Fallon, J. E. Gardiner and Bev. H. Neill.

After drafting an application for permission to so organize as called for by the Association's constitution and by-laws, the meeting adjourned.

The formation of the Galt Branch will make the seventh branch of the Association in Ontario, the others now functioning being Toronto, Hamilton, Brantford, Kitchener, Niagara Falls, and Peterboro.

National Poppy Day Campaign

Upon information from the G.W.V.A. of Canada, (Inc.), that on Armistice Day, November 11th, a National Poppy Day Campaign would be organized with poppies made by the women and orphan children of France to be sold by the G.W.V.A. and other approved patriotic organizations, the proceeds of which would be divided between the orphan children of France and the distressed cases among the Veterans of the Dominion, the Toronto Branch Executive agreed to give its cordial support to the scheme, and to recommend it specially to the generous consideration of the manufacturers.

Mrs. Pankhurst at Toronto Branch

A general meeting of the members of Toronto Branch was held in the King Edward Hotel, on Friday, Nov. 18th, when for the first time in its long record, the C. M. A. was addressed by a lady. Mention of this fact was made by R. H. Easson, Chairman of the Toronto Branch, in introducing Mrs. Pankhurst at a luncheon meeting of the Branch. There was a large gathering of members, as well as a number of ladies.

Mrs. Pankhurst, who appeared under the auspices of the Canadian National Council, for the promotion of Social Hygiene, took as her subject "THE PART THAT LARGE EMPLOYERS CAN PLAY IN MAKING A HEALTHIER COUNTRY". She stated that it had been discovered that where extreme and Bolshevik tendencies had been manifested, social diseases had been prominent factors. This, she claimed showed the relation between mental and physical disability. She gave an account of her investigations in Russia, both before and after the reins of government had been seized by Lenin and Trotsky.

She mentioned that she already had strong support from several of the large industries

in Toronto in her effort to gain moral and provincial support in the crusade which had been proceeding for sometime with marked success.

Hon. Mr. Justice Riddell stated that at one time, as president of an industrial company, he could himself claim the necessary qualification for membership in the C. M. A. He appealed to the manufacturers for their co-operation and support towards the success of the movement in favour of social hygiene, and afterwards, moved a vote of thanks to Mrs. Pankhurst, which was seconded by W. C. Coulter, and carried by acclamation.

New Members

Membership work in the Ontario Division during the past month, as indicated by the number of new applications passed by the membership committee, shows to somewhat better advantage than for some time past. In all, there were fifteen new companies added to the divisional strength during the period, not a bad showing considering the time of the year and the industries uncertainly brought about by the elections.

The new members which the Division welcomes into the Association are as follows:

The Canada Scale & Slicer Co. Ltd.....	Bowmanville
Bowron Bros.....	Hamilton
International Harvester Co. Ltd. (Addl.).....	Hamilton
Wallace Barnes Co. Ltd.....	Hamilton
John Mackay Ltd.....	Kingston
Canada Line Co. Ltd.....	Lindsay
Christie Concrete Products.....	Lindsay
John McCrae Machy. & Fdy. Co.....	Lindsay
London Motors Ltd.....	London
Atlas Engineering & Machine Co. Ltd.....	Toronto
Beaver Soap Co. Ltd.....	Toronto
Canadian Pad & Paper Co. Ltd.....	Toronto
Canadian Libby Owens Sheet Glass Co. Ltd.....	Toronto
Wahl Co. Ltd.....	Toronto
Neal Baking Co. Ltd.....	Windsor

Membership work is something which members might well keep in mind, it being worthy of note that every additional company brought into the Association strengthens the industrial position from a local, as well as a provincial sense. In almost every city and town in the Province new companies are coming into existence from time to time, and while the Divisional Secretary communicates with these at the earliest possible date, any actual effort put forth by the local manufacturer who is a member of the Association as well as a neighbor of the newcomer, is sure to be doubly effective.

Ontario members might think over this suggestion with profit to themselves and to the organization. Application Forms, additional circulars or reports or any other form of information or assistance will be gladly furnished on application to the Travelling Secretary.

Compulsory Registration

The Public Service Commission of Ontario is considering the advisability of recommending to the Government that it should be made compulsory for manufacturers to register lien notes taken for the purchase price of goods.

This would mean among other things that no unregistered lien notes would be good against third parties. It would also mean, of course, that the expense of the registration and of the organization necessary to carry it out would be thrown upon manufacturers.

This change is being strongly advocated by many of the sheriffs throughout the province and unless vigorous action is taken by this Association, the law is likely to be amended as indicated.

It has also been proposed that in the case of goods against which there are liens the sheriffs should be empowered to sell the goods subject to such liens.

Members of the Association in Ontario have been requested to send to the legal department their views with respect to the proposed legislation.

Activities of the Month in Prairie Division

Headquarters of Division, 408 Avenue Block, Portage Avenue, Winnipeg

Chairman.....W. G. Fraser, Beaver Soap Co., Ltd., Winnipeg.
Vice-Chairman.....J. W. Ackland, J. D. Ackland & Sons, Winnipeg.
Secretary.....G. E. Carpenter.

IN connection with the booklet being issued by the Department of Trade and Commerce, with a view to inducing British manufacturers to establish branch industries in Canada, the Executive Committee of the Prairie Division has suggested that in dealing with the Prairie Provinces the Department should insert a statement to the effect that they offer a field of great development for the manufacture of goods, especially from the natural products of the Prairies, the principal of which is agriculture. At the present time most of the surplus agricultural products of the prairies are exported in their raw state. The saving in transportation alone should be an inducement to manufacturers to locate at the source of supply and point of consumption. Thus it was thought that the development of all natural products of Manitoba, Saskatchewan and Alberta, such as lumbering, mining, (particularly coal mines) and the fisheries in the northern parts of these Provinces, were worthy of special mention, and the Department of Trade and Commerce has been requested to give prominence to these features in the compilation of the booklet.

New Members

J. M. Thompson, manager of Beatty Bros., Winnipeg, who is Chairman of the Membership Committee of the Prairie Division, reports continued activity on the part of his committee with the result that since November issue of Industrial Canada applications have been received from H. W. Page and Company, J. P. Sharp, J. Pickles, Canadian Excelsior Co. Ltd., Willow Art Furniture Manufacturers, Winnipeg Asbestos Company, Dominion Knitting and Manufacturing Co., Dominion Garment Company.

Elevator Regulations,—Manitoba

In 1916 a bill was introduced in the Manitoba Legislature dealing with the construction and operation of freight and passenger elevators. Among the drastic features of the bill was one providing for a permanent licensed operator to handle each freight elevator. There was such general opposition to this bill that it was withdrawn and a new bill substituted therefor simply providing for the appointment of an elevator board consisting of five members, to make regulations for the construction and operation of freight and passenger elevators to be effective upon approval by order-in-council.

When it came to the appointment of the elevator board, two manufacturers in the persons of T. A. Harp, manager of the Northwestern Brass Company and G. W. Murray, president G. W. Murray Company Ltd., were appointed on the board.

After many meetings and thorough consideration of the matter involved, from all angles, the elevator board drew up a set of regulations and placed same before the various commercial bodies for consideration, following this up by a public meeting.

The Winnipeg Branch C.M.A., has endorsed the proposed regulations and requested that they be brought into operation. The proposed rules are given below:—

"The present certificates are issued for three months in the case of passenger, and six months in the case of freight. The new certificates will be given for one year subject to a quarterly endorsement by an inspector. This change will make it unnecessary for owner to apply for renewal so frequently.

"The present arrangement is that inspections are to be made by a licensed inspector

or by an inspector of the Bureau. The proposed regulations will call for a direct inspection by inspectors of the Bureau with the idea of cutting out duplication of work, inefficiency and misunderstandings.

"Fees for inspection, when inspection is made by the Bureau, at the present time are \$5.00 for each inspection. When inspection is made by a licensed inspector, owner makes his own arrangements. Each permit certificate costs owner 25c. Under the new regulation the fee for each power driven elevator will be \$10.00 per annum, and \$5.00 per annum for each hand power elevator; these amounts to cover inspection and certificate and to be the only charge.

Passenger Elevator Rules

"On new installations, interlocking devices to be installed to prevent the car from being moved until the doors opening into the shaft are closed. These regulations apply on old installations, which must be equipped prior to June 1st, 1923.

"New regulations discourage any more than one entrance to passenger elevator in the case of installations in new buildings.

"In the case of high speed cars provision is made to cut off the current from the machine when speed governor trips.

"New regulations provide that buffers must be effective and regulation is drafted along the line of present practice.

"Regulations in this respect have been altered to coincide with the Winnipeg City by-law.

Power-Driven Freight Elevators

"New regulations provide that operators of freight elevators must hold licenses. In 1918 there were four fatal accidents on freight elevators, and it was felt that the licensing of operators would assist in a great measure in cutting out these accidents. In the case of warehouse and loft buildings, the Board sees no objection to owners having several men licensed, and the intended regulation is simply to forbid the operation of freight elevators by irresponsible persons.

"On high speed freight elevators a device is to be provided which will cut off the current from the machine when speed governor trips.

"The regulations have been changed to coincide with the City of Winnipeg by-law.

Hand Power Freight Elevator Rules

"In the present regulations the rules governing hand power elevators are not clear and specific, therefore, in the new regulations nothing new has been imposed, but an effort has been made to make the rules clear and specific.

"The converting of hand power elevators into power driven elevators is discouraged, as such conversion has been found to be impracticable and unsatisfactory.

Hand Power Dumb Waite Rules

"Remarks above in regard to hand operated freight elevators apply in the case of hand power dumb waiters. The regulations have been drafted along the line of present practice.

Power Driven Dumb Waiter Rules

"The above general remark applies in this instance also.

Cables on all Cars

"At least once every three years cable ends are to be cut off and refastened. The life of the cable fastenings is limited, therefore, this rule is deemed advisable.

"Owners will be interested in the Comparative cost to them of the present system as compared with the proposed system.

"Present Cost. Inspector's fees which are paid by the owner direct to licensed inspector or through the Insurance Company at the average of \$2.50 per inspection 4 times per year 10.00
"Permit Fees. 25c. per quarter. 1.00
Total Cost. \$11.00

Cost under Proposed Regulations.

Power Driven Elevators.—Total cost per annum \$10.00
Hand Driven Elevators.—Total cost per annum 5.00

"Where two or more elevators are located in the same building the rate is reduced \$1.00 for each additional elevator.

"This comparison shows cost to owners reduced in all cases as follows: If one power driven elevator only in building, reduced cost \$1.00 per annum; if more than one power elevator in building—reduced cost, \$2.00 per annum.

If hand driven elevator (one only) reduced cost \$6.00 per annum. If hand driven elevator (more than one in building) reduced cost \$7.00 per annum.

"The present inconvenience, inefficiency and irritation caused to the owners, as already explained in this memorandum will be overcome.

Inter-locking Devices

"This device prevents car being moved from the landing until all the gates are closed and would go far in preventing accidents, such as persons falling down shaft-ways, being injured getting on or off a car and those caused by operator leaving door unlocked. The accident wherein the late C. C. Chataway lost his life will be remembered by most of our citizens. Had the elevator in question been equipped with this device his life would in all probability have been saved.

Installation of Buffer

"On passenger cars travelling at a high speed the buffer at basement, to be of any service, must necessarily be one which will check the speed of the descending car, should it strike the buffer, in such a way that damage to the car or injury to passengers travelling in it will be prevented. The installation of improved type of buffers under high speed passenger cars is something that is being insisted on by owners as they find it economical.

Operators to Hold Licenses

"It is not the intention of the Regulation that the operator shall remain on the car and do nothing else. On the contrary, it is simply the intention of the Board that the regulation will prohibit the operation of the elevator by inexperienced or unauthorized persons. Many accidents have occurred through men, who knew nothing about the equipment, attempting to operate it, and the object of the regulation is to prevent these accidents.

In cases where owners find it inadvisable to keep one operator on the car at all times, the suggestion is that a number of men be instructed as to the proper operation of the car and be licensed; if this suggestion were followed there would be no occasion for delay or inconvenience."

W. N. Westman, president, Chatham Malleable and Steel Mfg., Co. Ltd., Chatham, writes:—

"We have enjoyed a good season's trade in spite of unsettled conditions generally and have kept a full staff the full time throughout the year. Our sales department are now active on looking up business for the New Year and are glad to report that conditions look very much improved for 1922"

The Dodge Manufacturing Company of Canada, Limited, Toronto, have issued a new general catalogue of power transmission, conveying and elevating machinery. It is well illustrated and contains complete descriptions of the many lines listed. Copies of the discount sheet will be supplied by the company on request.

News from British Columbia Division

Headquarters of Division, 705 Board of Trade Building, Vancouver

Chairman.....J. B. Thomson, Jas. Thomson & Sons, Ltd., Vancouver
Vice-Chairman.....R. W. Mayhew, Sidney Roofing & Paper Co., Ltd., Victoria
Secretary.....H. Dalton

A SPECIAL session of the British Columbia Legislature was convened on October 17th, principally for the purpose as announced by the Premier, of devising means for providing additional revenue for the municipalities. The method proposed by the government for raising this revenue was, as disclosed in the Budget Speech of the Minister of Finance, by the imposition of a personal property tax of one-half of one per cent. The B. C. Taxation Act now provides for a 1% personal property tax, this tax, however, being an alternative for an income tax and only being collected in the event of the personal property tax providing a greater return to the government than the income tax.

Under the proposal put forward at the current session of the Legislature, however, the optional features of the personal property tax were abolished, the intention being to retain the income tax, the proceeds of which would go to the government, and the personal property tax, to be collected by municipalities for the latter's own use. Needless to say, manufacturers and other business interests took strong exception to the imposition of this new tax and the B. C. Division, in co-operation with some twenty other business organizations, submitted the following brief to the Provincial Cabinet.

Memorandum in Regard to the Personal Property Tax

"The proposed personal property tax, has been termed by political economists as an unfair tax in its incidence; it is not economic, it is unjust and therefore has been abandoned as a form of taxation in most instances, and the existence of said tax is fast disappearing the tendency now being to treat the charges of local finance as payment of services rendered on equitable distribution of cost,—such cannot in any manner be obtained by the operation of a personal property tax.

"To illustrate the injustice of such tax, permit a few illustrations. The assessment is made upon certain classes in the community therefore the admission must be granted that it is class legislation. The main classes affected are the manufacturers and producers, levy being made upon their plants, machinery fixtures, raw materials, wages accrued in all and every process from source of raw material to final point of manufacture or production of crop to harvest point.

"This clearly shows that this tax places the burden upon the most important phase of production of wealth to any nation, province or municipality as the case may offer without any regard to the all important problem of market which at all times must meet competition, whether the trade be interprovincial or export, as supply and demand, coupled with price and quality under normal conditions make marketing of products possible. Therefore the proposed tax places an overhead charge upon all industry including agriculture which cannot be passed on to the consumer under a competitive basis, and cannot be even considered in any form therefore an indirect taxation.

"The next class affected by this tax is the wholesale distributor; this class functions largely in placing upon the market the products of two classes already referred to, both from a local, provincial, national or foreign sense; the tax interferes by placing an overhead charge upon that business, which

functions in the distribution to both the home and foreign markets and assuredly will make the trade depart to other provinces or foreign countries, whose wholesale distributors have an advantage of being allowed to function at a lesser cost, and therefore sell at a cheaper price both in the foreign and in the local provincial markets without being subject to payment of any tax, provincial or municipal, and still have an equal right in your home territory to sell the retail merchant in open competition with this immense advantage.

"Passing on to the retail merchant you stifle his opportunity to sell in competition to the mail order houses of Eastern provinces, or foreign houses. They have a free entry to his territory, be it provincial or municipal, at no cost of personal property tax.

"The burden of the payment of this tax falls upon the shoulders of the classes mentioned. What proportion are the following classes called to pay, practically nil, professions such as: lawyers, dentists, bankers, doctors, accountants, real estate and insurance brokers, insurance agents, clergy, retired citizens living upon investments (often of either foreign or Eastern character) those who earn a salary or known as the salaried class.

"We ask, do these practically exempt classes and their families, receive no benefits of education from the municipality: no police or fire protection; no use of roads or streets; no benefits from our water works or street lighting departments. We claim they do, and we do not think they will seek to deny the service. Therefore, we submit, it is class legislation of the worst character that would seek to place the responsibility of payment for services mentioned solely upon a few citizens of the community.

"As an example—Mr. Smith earning a salary of \$5,000; Mr. Jones, retail merchant, profits from whose business enables him to have a salary of \$5,000 per annum. The provincial government levy income tax of equal amount on both, then any contribution to provincial or municipal government ends for Mr. Smith. How about poor Mr. Jones, carrying a stock of, say, \$50,000 to earn his salary, he would have to pay \$500 if the proposed 1% personal property tax legislation is carried, or whatever percentage the levy may be. Mr. Salaried Smith has advantage of Mr. Merchant Jones, both are a necessity to the community and should contribute equally and any other treatment is unjust and class legislation.

"Personal property tax as a 1% tax on assets as described may mean anything but a 1% levy on profits; As an example:—Provincial Extraction Co., Ltd.

Personal property—assets taxable \$500,000—levy 1%
Profits earned for year 6% on capital, \$30,000
Tax payable \$5,000—16 2-3% of profits earned.

"This is a much higher rate of taxation than present Federal and provincial Income Tax, nearly the combined amount collected by both governments in taxes if exemption promised is allowed. Again, if Provincial Extraction Company, Ltd., make a loss instead of a profit, what happens, say with \$500,000 personal property—1% levy, \$5,000—deducted and paid to either provincial or municipal government out of capital account, or by way of a loan from bankers, or others, penalizes probably an infant in-

dustry that should be fostered to develop our resources, provide employment for our citizens and broaden legitimately by earning capacity the already too heavy burden of taxation on a limited population. We ask the question is such a form of taxation economically sound? Will not the enactment of such legislation have the effect of deterring largely the investment of foreign capital which we so much require? Will foreign capital come to be taxed before it is given the opportunity possibly to earn a profit, while other provinces and municipalities in those provinces offer bonuses, exemption or low rate of taxation, cheap power, and many other inducements? It is not human to expect it.

"Secondly, to place such taxation on existing industries and commercial enterprises that they cannot get products marketed profitably, the result must be apparent:—closing down, consequent unemployment; calling for government assistance; depletion of earning power resulting in cessation of payment of existing taxes to provincial government.

"Surely there can only be one admission,—such form of taxation is not economic.

Gladstone's Policy

"Let us point out Gladstone's policy in English finance inherited from Peel—"The avoidance of deficits or undue surpluses, estimate expenditure liberally, estimate revenue carefully, so as to make each year pay its own expenses and to take care that your charge is not greater than your income." This method of treatment requires that taxation shall be productive in yield, and that it shall be so elastic as to admit of expansion, with due regard and care as to the treatment of national and provincial resources. The reaction of ill-chosen taxes on industry is a hindrance to their productiveness and their growth.

"In closing let us point out that all sane commercial bodies, be they manufacturers and producers, wholesale distributors or retail distributors, during the reconstruction period fully realize, that today and for some years to come they must not depart from the policy laid down by such an able statesman as Gladstone. We must cease every form of extravagance, economize, conserve, if we want to weather the strain under which we are placed and we feel that our governing bodies, Federal, Provincial and Municipal, would be negligent of the duty of office if they do not set this example to all.

(Signed) JAS. B. THOMSON,
Acting-Chairman, Joint Taxation Committee.

Opposition From Municipalities

The Union of B. C. Municipalities, who have spared no effort toward convincing the government of the need for additional revenue for the municipalities, have expressed to the government their unwillingness to accept the mode of relief proposed through the personal property tax, pointing out that only in the case of the larger municipalities, such as Vancouver, Victoria and New Westminster, would the revenue therefrom amount to enough to justify the cost of collection.

At the time of writing the Budget Speech is still under debate, and it is consequently impossible to indicate what final action will be taken by the government in regard to his new tax, but the B. C. Division and other organizations are continuing an active opposition to same in the hope that the government will be dissuaded from carrying out the proposal of the Minister of Finance.

(November 23—Since the above was written, announcement has been made by Premier Oliver and Finance Minister Hart of the withdrawal of the Personal Property Tax—H.D.)

News Relating to Export Trade

Published by Arrangement with
Canadian National Export Club

THE following business and financial men from other countries have called at the Commercial Intelligence Department, C. M. A. during the last month:—F. W. Milling, Port-of-Spain, Trinidad; S. A. Solomon, London, England; J. H. P. Bayley, Bridgetown, Barbados; E. L. Kirton, Port-of-Spain, Trinidad; Thomas L. Leitch, Manager, Canadian Bank of Commerce, Mexico City, and B. Mendelsohn of Mendelsohn & Frost, Port Elizabeth, South Africa.

"ter Meulen" Scheme of International Credits.

Sir, Drummond Fraser, who has been appointed organizer of the "ter Meulen" plan on international credits is now in the United States. This scheme which was worked out by Mr. ter Meulen of Messrs. Hope and Company, Amsterdam was adopted by the international Financial Conference held in Brussels in September 1920. It has since been accepted by the Congress of the International Chambers of Commerce and a Convention of the American Bankers Association. Sir Drummond Fraser believes that the one thing now required to bring the "ter Meulen" plan into universal operation is public opinion and this public opinion must be backed by the healthy pressure of exporters.

German Competition Lessening

A Special Committee appointed by the Federation of British Industries to enquire into the question of trade depression in the United Kingdom has prepared a memorandum, and it is interesting to note their conclusion as to the future of German competition: "It is possible that the financial and other difficulties of our European competitors will in the long run so impair their productive power as to render them less formidable competitors for some time to come, than the conspicuous effect of the exchange is leading us to consider them at the present time. In this connection it is interesting to note that there are already signs that Germany, the most formidable to these competitors, may already be becoming a less important factor. They have obtained substantially fewer foreign orders at recent International Fairs, such as Leipzig and Utrecht than they obtained last year, and there are some reports from countries adjacent to Germany that they are failing to deliver goods ordered some months ago, and that in some cases additions have been made to prices previously agreed upon. These indications are slight at present, but tend to confirm the belief that the present competitive power of Germany is based very largely on artificial and temporary conditions which must in the course of time disappear, these temporary conditions, of course, being the continued inflation of German currency and the direct and indirect subsidies to the cost of living to which are due in part the lower labor costs in German manufactories."

Navy Contracts

We have received information that the Director of Navy Contracts will be prepared to consider application from Canadian firms to be placed on the Admiralty list of firms who will be invited to tender for various supplies. Communications should be addressed: Director of Navy Contracts, Admiralty, London, S. W. 1., Eng.

Bridge to be Built Across Sydney Harbour

The Canadian Trade Commissioner in Australia announces in the Weekly Bulletin of Trade and Commerce that "Tenders are invited by the Government of New South Wales for the construction of the superstructure and substructure of a centi-lever

bridge across Sydney Harbour from Dawes Point to Milson's Point, embracing a main span of 1,600 feet in the clear, centre to centre of main piers, or 2,600 feet centre to centre of anchor piers. The total length of bridge included in tender is 3,816 feet, centre to centre of abutments. The deck of the bridge is to include four lines of railway and a roadway 35 feet wide between main trusses; and cantilevered outside the main trusses on the western side, a footway of 15 feet wide, and on the eastern side a motor roadway 18 feet wide. Copies of the specification, including plans and general conditions, and schedule of quantities will shortly be forwarded by the Department of Public Works of New South Wales to the Department of Railways and Canals, Ottawa, from whom interested Canadian manufacturers and bridge builders will be able to obtain copies. To supply any further information required by prospective tenderers, the Chief Engineer of the Public Works Department (Mr. J. J. C. Bradfield) purposes being in Canada in April, May, 1922. Tenders in accordance with the specification must reach the Under Secretary for Public Works, Sydney, N. S. W., not later than October 31, 1921."

Export Credits.

Recent reports from South America indicate that the Germans have not yet gone back to their pre-war habit of allowing six and twelve-month credit, but ninety and one hundred and twenty day credit from receipt of goods is usual.

November Meeting of Toronto Export Club

The principal speaker at the meeting of the Toronto Export Club on November 16th. was L. L. McMurray, Gutta Percha & Rubber Limited, who gave some of his experiences in the development of an export market. The club, he said, was to be congratulated on its association with the C.M.A. as their records and services have been of invaluable assistance in such matters as tariff information, invoice requirements and the securing of credit information on firms in different parts of the world. He had found that the Canadian Trade Commissioners were very willing to assist exporters in every way open to them. He advised members to make more use of them.

The development of the exporting business of the speaker's own firm dated to the days of the South African war, when a New Zealander, staying in Toronto, noticed a Union Jack flying on their building in celebration of some victory. He called at the office and made arrangements to handle their lines in New Zealand. Since then they had found their relations very satisfactory.

With regard to the question of contracts, Mr. McMurray thought that the whole thing was to have a contract satisfactory to both parties. The best plan was to send out a man from one's own concern, but if agents were employed he was in favour of securing a young and aggressive firm in preference to old established firms handling many lines.

B. B. Halladay, chairman, was also of the opinion that more use should be made of the Canadian Trade Commissioners. In his tour for the Canada Cycle and Motor Company most of them complained that they did not hear often enough from Canadian manufacturers and never saw their representatives. Resident agents were not absolutely necessary in British countries, but in countries like China and Japan, where business is practically all done through an agent, it was necessary to have one.

He strongly advised making quotations c. i. f. in the currency of the country to which exports were being made. This meant taking a risk on the exchange, but he thought that the risk should be taken. Our best export markets are in the British Empire, he thought and there was a sentiment in favour of Imperial goods that gave the Canadian exporter a great advantage.

At the meeting the report of the Foreign Markets and Transportation Committee's meeting on November 14th was read. Several suggestions as to improving foreign mail and parcel post service had been considered and a circular issued to members inquiring as to their interest in these questions.

A letter was read stating that consignments "to order" are not recognized by fiscal authorities in Colombia and Venezuela. The only manner in which shipments could be made was by consigning the shipment under previous agreement with the bank or import agents and the importer to a bank or to import agents.

The Committee also considered the question of export trade finance and the advisability of securing information as to the various export credit financing plans, such as the Ter Meulen plan and the British Export Credits Scheme. The Commercial Intelligence Branch of the Department of Trade and Commerce was willing to investigate these schemes and prepare full information about them.

The following were elected honorary members of the Toronto Export Club:—H. R. Pousette, director, Commercial Intelligence Branch, Department of Trade and Commerce, Ottawa; G. F. Towers, superintendent, Foreign Trade Department, Royal Bank of Canada, Montreal; S. H. Logan, superintendent, Foreign Trade Department, Canadian Bank of Commerce, Toronto; B. S. Darling, Bank of Montreal, Toronto; Gilbert Jackson, professor of Economics, University of Toronto.

Agreement on Nitrate Expected

"The Foreign Trade Bulletin" of the American Express Company reports that "The settlement of the difference between the Chilean nitrate 'pool,' composed of foreign shipping and export companies, on the one hand, and the association of Chilean producers on the other, in such a way as to permit the export of nitrate at prices more in line with present conditions is confidently expected in Valparaiso. These differences go back to an agreement made between the trust and the producers in 1919, under which the trust agreed to take various amounts of nitrate at several prices, the producers agreeing not to sell nitrate at less than 17 shillings per quintal before June last, at not less than 14 shillings between that date and March 31, 1922, and at not less than 9 shillings during the remainder of the agreement. Due to competition from synthetic nitrate, and to the general business depression, both trust and producers found themselves unable to dispose of nitrate at the prices fixed, with the result that since the beginning of the year the producers have been forced to decrease production until it now amounts to only about one-quarter of the normal. Nitrate is Chile's most important export."

C. P. R. Steamship Extensions to West Indies.

The Canadian Pacific liner Sicilian has been refitted and left London on November 15th for St. John, via Antwerp. She sails from St. John on December 5th to inaugurate a new passenger and freight service from Canada to Havana, Cuba, calling en route at Boston and Nassau, Bahamas. Representatives of the Canadian Pacific are now in the West Indies arranging other ports of call and establishing agencies.

Transportation Department

Reduction in General Rates, and Other Transportation Matters of Interest

General Rate Reduction

The Board of Railway Commissioners on November 24th issued General Order No. 350 requiring all steam railway companies subject to the jurisdiction of the Board to file tariffs effective December 1st, 1921, providing for a reduction in domestic freight rates within Canada as follows:—

1. In the territory East of and including Westfort, Fort William and Port Arthur, rates to be based on 25 per cent over those in effect prior to September 13th, 1920.
2. In territory West of and including Port Arthur, Fort William and Westfort, rates to be based on 20 per cent over those in effect prior to September 13th, 1920.
3. Through rates between Eastern (1) and Western (2) to be applied respectively to the Eastern and Western factors of the through rates except transcontinental commodity rates, see No. 4.
4. Transcontinental commodity rates Eastbound and Westbound to be 23½ per cent. over rates in effect prior to September 13th, 1920.

Recognized differentials in commodity rates to be preserved as far as possible.

The order does not reduce rates on coal, crushed stone, sand or gravel, nor rates which subsequent to September 13th, 1920, have been reduced below the amounts specified above.

Assistant Chief Commissioner McLean in a memorandum attached to the General Order explains the position which he had taken in connection with the former judgment of the Chief Commissioner in September pointing out that he could not at that time determine the justifiability of a decrease in rates pivoted upon the question of wage reductions, which question had not been settled; an agreement having since been made between the Canadian Pacific and its employees (October 8th, 1921) and the figures having been examined as result of this agreement. Assistant Chief Commissioner McLean finds he is now justified in agreeing with the Board's decision as embodied in General Order No. 350.

Commissioners Boyce and Rutherford have also written a memorandum in connection with this matter, pointing out that their view in connection with this whole question was strongly in favor of a policy of requiring from the railway companies substantial reduction in the freight rates on basic commodities such as grain, lumber, pulpwood, coal, ores and other specified raw materials as being of vastly greater importance than a percentage reduction on all classes of freight; they, however, being in the minority, were prepared to agree to the straight percentage reduction required by General Order No. 350.

In regard to the merits of a flat percentage reduction or specific reductions on basic or raw materials, there are, of course, various arguments on both sides. It is a fact, however, that a straight percentage reduction on all commodities, while it affects all rates and therefore would appear to reduce the costs of all commodities by that amount, yet this reduction necessarily would have to be very small and it is doubtful whether or not the reduction would make a very material difference except on possible long haul rates, which, of course, is an important matter. However, on the other hand, a reduction in the basic materials, if confined to these materials, would naturally be greater and

on such items as coal, lumber, pulpwood, etc., which are used in very large quantities in the production of other materials, it is safe to say that the reduction would mean quite a saving. The fact remains, of course, that the reduction of specific commodities based upon what the traffic will bear takes considerably longer to work out than a flat percentage reduction all round. Therefore, on account of the necessity for prompt action regarding reduction in rates so as to somewhat stabilize the situation regarding freight rates the percentage reduction was probably necessary.

The Board have also issued General Order No. 351 amending Order 350 requiring that the rates on cordwood, slabs, edging and mill refuse for fuel purposes be restored to the basis in effect prior to September 13th., in other words removing the increase of 10 per cent. allowed in the decision last year.

It is interesting to note that the railway companies were advised in Ottawa at conference with the Board of Railway Commissioners on Tuesday, Nov. 22nd., that the rate reductions in accordance with their Order No. 350 should take effect on December 1st., and the Order carries out this requirement. Naturally this meant considerable work on the part of the different tariff bureaux to re-figure the various rate scales and issue their tariffs so that they would be in the hands of the agents by December 1st. This, of course, is an impossibility in all cases. While a great number of the tariffs will undoubtedly be in the hands of the agents by December 1st., there is no question but some of them will not. In addition to this the Westbound and Eastbound tariffs on class and commodity rates including transcontinental commodity tariffs issued by G. C. Ransom, Montreal and W. E. Campbell, Winnipeg, respectively, cannot be issued until some days after the 1st. of December, owing to the fact that increases applicable to the through rates between the East and West are different for the Eastern and Western portions. This makes it necessary to re-figure the various rates in the class rate tables, as well as the commodity rates, and thus making it impossible to issue and distribute the tariffs by December 1st. On account of this fact, and the fact that no extension of time has been granted the railways for issuing of these tariffs, interested shippers should keep very careful check of their shipments made from the 1st. of December until say, the 15th or 16th, and later if necessary, as undoubtedly agents will charge the rates in effect at the present time until they receive these new tariffs. Claims for over-charge should be made on the carriers for the difference which will be promptly handled by them.

Members may be interested in knowing that the Association has been very active in connection with this question of reduction in freight rates for several months. In fact the Transportation Committee in the Spring appointed a sub-committee to work up a memorandum for presentation to the Railway Association of Canada. This memorandum, set forth the reductions which had taken place in the costs of various items entering into cost of operation. This memorandum was adopted by the Transportation Committee and approved by the Executive Council, who also appointed a Committee to place the matter before the Executive Committee of the Railway Association of Canada. The memorandum called upon the railways for the consideration of a reduction in freight rates at the earliest possible moment. It was presented to them in August of this year and the Railway Executives explained that they were not in a position just then to consider

a general reduction in rates pending some definite decision regarding the question of railway wages. The matter was again taken up following the agreement between the Canadian Pacific and its employees on October 8th, pointing out that the objection referred to in former conference had disappeared. In the meantime the Board of Railway Commissioners also took this question up with the carriers resulting in the disposition affecting reduction in rates on December 1st.

Rates from Vancouver Eastward placed on proper basis by recent Decision of Board of Railway Commissioners.

On October 11th, the Board of Railway Commissioners issued Order No. 31618, dealing with application of the Canadian Manufacturers' Association for readjustment in class rates applicable from Vancouver, Victoria, New Westminster to points in British Columbia, Alberta, Saskatchewan, and Manitoba and in the opposite direction, placing them on the basis outlined in General Order of the Board No. 125, dated May 30th, 1914, dealing with what is known as the "Western Rates" case. The decision reads as follows:—

"THE BOARD ORDERS that the Canadian Pacific Railway Company be, and it is hereby, required to publish and file tariffs, to become effective on or before the 1st day of December, 1921, showing special class rates from Pacific termini, as follows, namely:

"Between Vancouver and New Westminster and points east thereof—

"1. To and from Glacier, British Columbia, the rates to be no greater than those of the 'Pacific' standard tariff for 290 miles.

"2. To and from points west of Glacier, the 'Pacific' territory 'Town' tariff basis to be applied, subject to the rates to Glacier (1) as maxima.

"3. To and from points beyond Glacier within 'Pacific' territory, the maximum first-class rates to be those of the 'Pacific' standard tariff for the through mileage, made up of the actual distance beyond Glacier, added to the above mentioned assumed distance of 290 miles west of Glacier.

"4. To and from points in 'Prairie' territory west of Fort William the maximum first class rates to be those west of Canmore and Crow's Nest, plus the 'Prairie' standard first-class rate difference between the actual mileage west of Canmore and Crow's Nest and the actual through mileage to or from the 'Prairie' destination or shipping point as the case may be.

"Note—From the first-class rates constructed as above, the rates for classes 2 to 10 to be extended in accordance with the scaling of the standard tariff, so as to preserve the proportion between the classes. If the exact first-class rate is not given in the 'Pacific' standard tariff, the next higher rate is to be used."

(Sgd.) F. P. Carvell,

Chief Commissioner

Board of Railway Commissioners."

This decision established rates from Vancouver to all points Fort William and West, which should have been established on September 1st, 1914, in accordance with the Western Rates case judgment, plus the various increases which have been made since that time. While the decision mentions only the Canadian Pacific Railway, on account of the fact that that was the only road under the jurisdiction of the Board at the time of the former decision, it is nevertheless a fact that the Canadian National Railway Company have re-aligned their rates on the same basis. We also understand that the reductions required by the Board under General Order 350 will also apply to these rates in view of the fact that they should have been estab-

(Concluded on Page 80)

Tariff Department Bulletin

Record of recent Board of Customs Decisions, Departmental Rulings, Excise Tax Rulings and other useful information.

Exceptions to Ruling on Custom Work published in Circular No. 330 of October 13th.

The Department of Customs and Excise state that there are certain exceptions to the ruling on Custom work which appears on the first page of our Circular No. 330 as being effective from the 1st of October, 1921. The general ruling is that charges for Custom work are subject to sales tax. The exceptions notified by the Department are charges made for "Milling lumber in transit", and "Custom sawing performed upon logs belonging to a farmer."

With regard to "Milling lumber in transit", the Department states as follows:—

"In the case of lumber which has been subjected to sales tax of 2—prior to shipment the tax does not apply upon charges for milling in transit.

"If the lumber has not been subjected to sales tax of 2— at the time of shipment, sales tax is not applicable upon the charges for milling in transit but 2— must be paid when the goods are actually sold."

With regard to "Custom sawing performed upon logs belonging to a farmer", the Department states as follows:—

"Charges for custom sawing performed upon logs belonging to a farmer are not subject to the payment of sales tax whether the material be for the use of the farmer or for resale by him."

Important Change in Estimating Customs Duty in New Zealand

The Canadian Trade Commissioner in Auckland, New Zealand, recently reported to the Department of Trade & Commerce at Ottawa as follows:—

"A notification has been issued by the New Zealand Government that—'On and after January 1, 1922, from countries having an appreciated rate of exchange (this really means conversion), computed with reference to the relative values of the sovereign and of the gold and silver monetary units of such countries, the goods will be assessed for duty at the banking rate of exchange (should be conversion), at or about the time of the exportation of the goods, as nearly as such rate can be ascertained.'

"This subject was discussed with the Collector of Customs and he states that it will become operative upon goods arriving here on and after January 1, 1922. The following example will illustrate what it means:—

"Today L100. worth of goods are assessed for Customs purposes, if coming from Canada, at \$4.86 to the L. As today's Montreal rate is \$4.02 to the L, these goods if they arrived under the new conditions, would be assessed for duty at \$4.02 to the L. instead of \$4.86. This is a very important innovation."

New Canadian Regulations

(Concluded from page 52)

"We were shut out of a lot of business during the war simply because we could not comply with this regulation, and as there are large quantities of French canned goods brought into Canada every year, we should insist that this clause should either be waived or we on our part should insist upon a similar clause for Canada. At the present time we could undoubtedly get some business for France were our tins stamped in this way."

You probably will suggest, why do we not make all of our cans in that way. This of course would be possible, but the stamping of the tins with a sharp die has a tendency to

weaken the can, permitting the acid to eat through the tin, and thus making perhaps a very severe loss."

The Law in United States

The following extract from United States Tariff, Section IV. will show how the law applies in that country:—

"F. Subsection 1. That all articles of foreign manufacture of production, which are capable of being marked, stamped, branded, or labeled, without injury, shall be marked, stamped, branded or labeled in legible English words, in a conspicuous place that shall not be covered or obscured by any subsequent attachments or arrangements, so as to indicate the country of origin. Said marking, stamping, branding or labeling shall be as nearly indelible and permanent as the nature of the article will permit.

"All packages containing imported articles shall be marked, stamped, branded, or labeled so as to indicate legibly and plainly, in English words, the country of origin and the quantity of their contents, and until marked in accordance with the directions prescribed in this section no articles or packages shall be delivered to the importer.

"Should any article or package of imported merchandise be marked, stamped, branded, or labeled so as not accurately to indicate the quantity, number or measurement actually contained in such article or package, no delivery of the same shall be made to the importer until the mark, stamp, brand or label, as the case may be, shall be changed so as to conform to the facts of the case.

"The Secretary of the Treasury shall prescribe the necessary rules and regulations to carry out the foregoing provision.

"F. Subsection 2. If any person shall fraudulently violate any of the provisions of this Act relating to the marking, stamping, branding, or labelling of any imported articles or packages; or shall fraudulently deface, destroy, remove, alter or obliterate any such marks, stamps, brands or labels with intent to conceal the information given by or contained in such marks, stamps, brands, or labels, he shall upon conviction be fined in any sum not exceeding \$5,000, or be imprisoned for any time not exceeding one year, or both."

* * * * *

"Item 128. Provided further, that all articles specified in this paragraph shall, when imported, have the name of the maker or purchaser and beneath the same the name of the country of origin diesunk conspicuously and indelibly on the blade, shank, or tang or at least one or, if practicable, each and every blade thereof.

"The articles specified in this item are:— Penknives, pocketknives, clasp knives, pruning knives, erasers, manicure knives, and all knives by whatever name known, including such as are denominatively mentioned in this section, which have folding or other than fixed blades or attachments, and razors."

* * * * *

"Item 130. Provided, that all the articles specified in this paragraph when imported, shall have the name of the maker or purchaser, and beneath the same the name of the country of origin indelibly stamped or branded thereon in a place that shall not be covered thereafter.

"The articles specified in this item are:— Table, butchers' carving, cooks', hunting, kitchen, bread, butter, vegetable, fruit, cheese, carpenters' bench, carriers' drawing, farriers' fleshing, hay, tanners' plumbers',

planters', palette, artists' and shoe knives, forks and steels, finished or unfinished, without handles."

* * * * *

"Provided, that all watch and clock dials, whether attached to movements or not, shall have indelibly painted or printed thereon the name of the country or origin, and that all watch movements, and plates, lever clock movement with jewels in the escapement, whether imported assembled or knocked down for reassembling, and cases of foreign manufacture, shall have the name of the manufacturer and country of manufacture cut, engraved, or diesunk conspicuously and indelibly on the plate of the movement and the inside of the case, respectively, and the movements and plates shall also have marked thereon by one of the methods indicated the number of jewels and adjustments, said numbers to be expressed either words or arabic numerals; and if the movement is not adjusted, the word "unadjusted" shall be marked thereon by one of the methods indicated; and none of the aforesaid articles shall be delivered to the importer unless marked in exact conformity to this direction.

"The articles specified in this item are:— Watch movements, whether imported in cases or not, watchcases and parts of watches, chronometers, box or ship, and parts thereof, lever clock movements having jewels in the escapement, and clocks containing such movements, all other clocks and parts thereof, not otherwise provided for in this section, whether separately packed or otherwise, not composed wholly or in chief value of china, porcelain, parian, bisque, or earthenware; all jewels for use in the manufacture of watches, clocks, or meters; time detectors; enameled dials and dial plates for watches or other instruments."

In his book "Practical Exporting", B. Olney Hough, editor of the "American Exporter", sums up the situation (page 411) when he says:—

"Although not always necessary, it will never be a mistake to stamp all export goods 'Made in U.S.A.' Regulations affecting goods of different sorts in many countries of the world are so many and complicated that a whole book and a large one would be required to explain them in detail."

The enforcement of the depreciated currency legislation and the success of British tariff preferences depends a very great deal upon requiring the country of origin to be marked on imported goods.

There is very considerable misapprehension about the extent of application of the Canadian law. The marking of the name of the country of origin upon all imports is not required. Under section 18 of the regulations there is a long list of exemptions which no doubt you have noticed. When we consider the terms of this section they are found to be very comprehensive. However, there are many parallel questions that are merely details of administration which can be ironed out by making representations to the Customs Department.

Denatured Alcohol

The Department of Customs and Excise according to a recent circular, has authorized the manufacture and sale, by licensed distillers, of a grade of completely denatured alcohol, which will be known as "Grade No. 2. Pyridine."

This grade of denatured alcohol may be sold for general use without restriction, as may also the grade known as "Grade No. 2, Benzol," the manufacture of which was authorized about a year ago.

What an eminent authority
says on costs:

The correct basis of distribution of rent, insurance, taxes, repairs and depreciation is **time**. It is clear, also, that such expenses as power, light and heat when applied to actual productive operations are logically distributed on a **time** basis through a machine rate.

DEXTER E. KIMBALL, M. E.,
*Professor of Machine Design and
Construction, Cornell University.*

Your Chief Cost
is
TIME
and
Your Chief Loss
is
TIME

WHEN you think of costs—as all business is doing today—think of Time, which chiefly governs those costs. Time is at once the most expensive and the most elusive factor in a business. It should receive first attention when increased efficiency and economy are sought.

International Time Recorders

keep time mechanically; encourage punctuality and full-time production; stop time leaks; provide full and accurate data for correct payrolls; and greatly reduce clerical work and expense.

International Job Time Recorders complete the protective policy by showing the exact distribution of time in each working day, job by job. They supply necessary cost-keeping records, improve superintendence, link each day's working hours with the actual results accomplished and give every minute its true production value.

Internationals are made in 260 models, either electrically-operated or spring-driven and adapted to all lines of business.

May we show you how YOUR requirements can be filled perfectly ?

INTERNATIONAL BUSINESS MACHINES CO., LIMITED

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For your convenience we have Service and Sales Offices in VANCOUVER, WINNIPEG, WALKERVILLE, LONDON, HAMILTON,
TORONTO, OTTAWA, MONTREAL, QUEBEC, HALIFAX, ST. JOHN, Nfld.

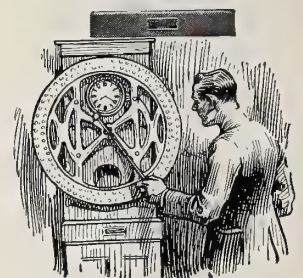
Also manufacturers International Dayton Scales and International Electric Tabulators and Sorters.



Job Recorder



Card Recorder



Dial Recorder



“At Your Service”

International Time Recorder Service Men Cover Canada

Equip Yourself to “Turn the Corner”

International Time Recorders

Speed up production, trace business wastes, record losses, prove costs and insure the payroll. When you buy an International you have the assurance—not merely the promise—of continued service. Our service does not end with the sale. It begins there. Our Service Stations with their staffs of skilled men are established for your convenience in all the principal cities of Canada. Treat your Recorder as well as you do your delivery truck—have it inspected occasionally.

Our experience is at your disposal in equipping yourself to turn the corner. A card will bring one of our representatives.

International Business Machines Co., Limited

FRANK E. MUTTON, Vice-President and General Manager

Head Office and Factory, ROYCE AND CAMPBELL AVENUES, TORONTO

For your convenience we have Service and Sales Offices in VANCOUVER, WINNIPEG, WALKERVILLE, LONDON, HAMILTON, TORONTO, OTTAWA, MONTREAL, QUEBEC, HALIFAX, ST. JOHN, Nfld.

Also manufacturers International Dayton Scales and International Electric Tabulators and Sorters.

A MESSAGE FROM I. B. M. Co.

Are You Equipped to “Turn the Corner”?

Are you waiting? If so, what are you waiting for? Business is on the move! The head of the procession has already turned the corner! Are you going to be a pace-maker or a tail-end? Use your accelerator! What are you waiting for?

Business is on the move! How do we know? Just a moment—and we'll give you the story in figures. Nothing is more responsive to the quickening and revival of trade than the demand for International Business Machines. Glance at the sales records of the International Time Recorder the Dayton Scale, the Electric Tabulator. In these you have the real speedometers of Business Progress, and here is what the records show:—

INTERNATIONAL TIME RECORDERS—Sales within the last two months increase 40 per cent. over those of preceding 4 months.

DAYTON AUTOMATIC SCALES—Sales to date in 1921 increase 18 per cent. over those of 1920.

INTERNATIONAL ELECTRIC TABULATORS—Sales in 1921 increase 20 per cent. over 1920.

Ponder these figures and you know what employees of labor, and the men in the mercantile field all over Canada are thinking and doing. The men and the firms who “turn the corner” first are those who reduce overhead and improve their merchandising with the modern, high class International Business Machines.

What are YOU waiting for?

—INTERNATIONAL BUSINESS MACHINES CO., LIMITED

ARE YOUR PATENT DRAWINGS PERFECT DETAILS?

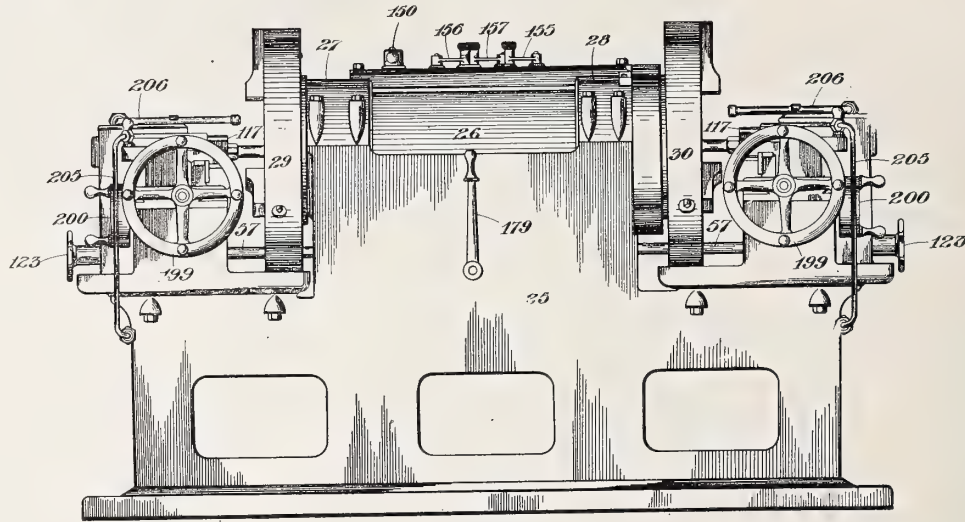


FIG. 4.

Expert Illustrations Make Valuable Patents

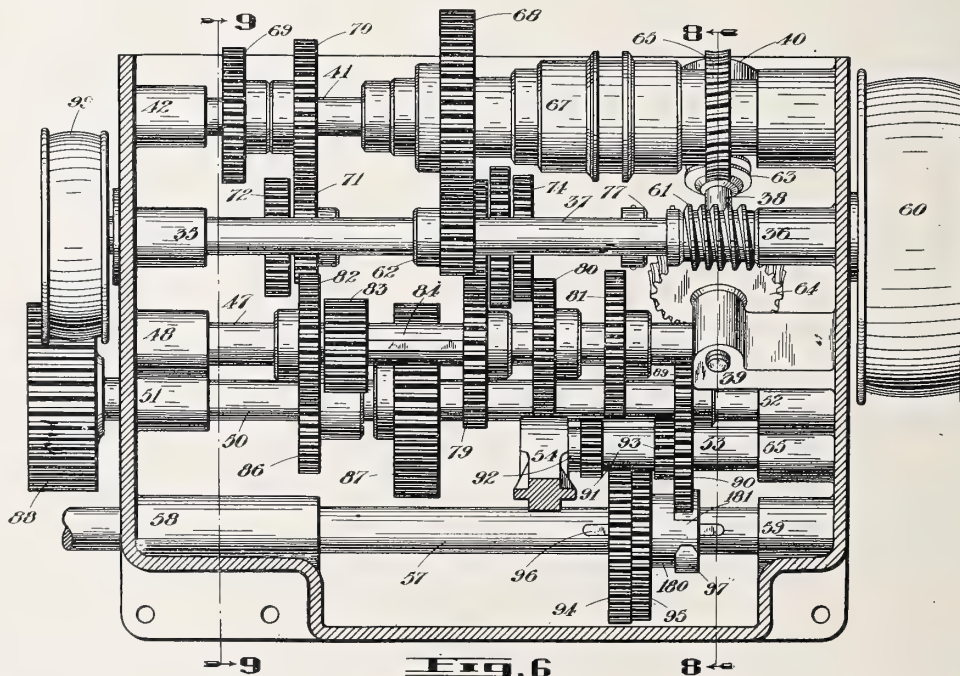


FIG. 6

CONSULT

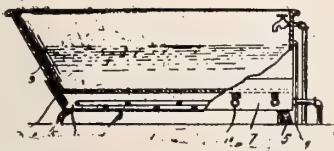
HAROLD C. SHIPMAN & CO.

Attorneys and Counsellors in Patent and Trade Mark Causes

151 BANK STREET, OTTAWA

(10 Expert Draughtsmen—nothing too complicated to detail on paper)

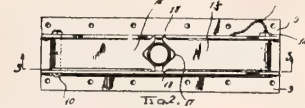
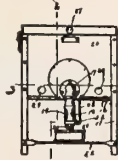
PATENTS FOR SALE



BATH TUB HEATER: This invention relates to improvements in heaters for bathtubs, laundry tubs or the like. The object of the invention is to provide a heater adapted to support the bathtub or laundry tub and heating elements in the same for heating the bottom of the tubs and means for controlling the said heat. For further information regarding sale of Canadian and United States patents write Mr. Walter O. Jarrett, 1365 Lansdowne Ave., Toronto, Ont.

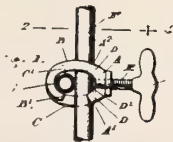
DOUGH RAISERS: This invention relates to new and useful improvements in dough raisers and particularly to heating devices therefor. One object of the present invention is to provide a novel and improved means for regulating the flame of the heating lamp whereby the temperature within the device will be maintained at a constant degree. Another object is to provide a device of this character which includes a novel and improved cover so constructed that the heat will be retained within the casing but at the same time permit inspection of the interior without the necessity of raising the lid or cover.

For detailed information regarding sale of Canadian and United States patents communicate with Mr. Carl Goodeman, Eagle Lake, Minn.

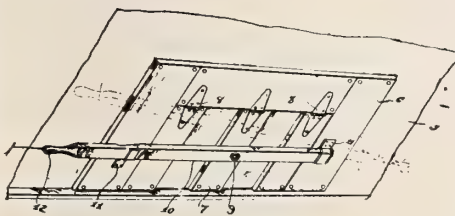


PIPE HOLDERS: This invention relates to a construction which will be used for holding pipes while removing a pump from a well or while piping the well after drilling. In fact, the same construction may be used in lowering pipes or raising the same where couplings have to be made or disassembled. The object of my invention is to provide a simple and inexpensive construction which will grip the pipe and hold it. Write Mr. L. E. Ferguson, Parkland, Alta., who has Canadian and United States Patent for sale.

HOLDER: This invention relates to a holder comprising a body portion, two shanks extending from said body portion and provided with ends describing substantially parallel hooks oppositely disposed relatively to said shanks and means for clamping articles in said hooks. Write Mr. Simon Jones, 175 East 68th St., New York City, N.Y., who has Canadian patent for sale.

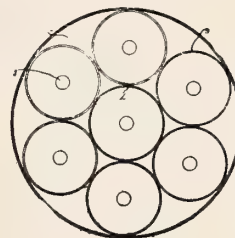


METHOD OF RETTING FIBROUS STRAW: Mr. J. Masson, 1418 East 4th St., of Duluth, Minn., has discovered a new and useful method of retting fibrous straw. This process thoroughly dissolves the gum and renders the straw or woody portion, tender and brittle, and when run through a regular scutching machine, leaves a fine silky flax fibre capable of being combed or carded and spun into yarns suitable for crash towellings and other goods,—also can be manufactured into binder and other twines very successfully.



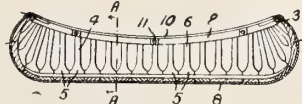
END MEMBER FOR WAGON BOXES: This invention relates to end members for wagon boxes and consists more particularly in a door construction which will be used in carting grain to elevators. The object

of my invention is to provide a wagon box provided with a door at the end and a means which can be easily released so that the grain can flow out into the elevator spout. A further object is to provide a wagon box having an end provided with a door, which door has a pivotally mounted locking arm with a holding means which can be easily released while operating the arm. For further particulars regarding this invention, write Mr. I. S. Livingstone, care Nugget Hotel, Winnipeg, Man.



CAKE CUTTERS. This invention relates to cake cutters and has for its object to provide a means whereby a number of cookies, buns, or other cakes can be cut out of a rolled piece of dough into the shape desired. A further object is to provide a novel means of making a cake cutter whereby the central cutter is formed from the ends of the outer cutters encircling the same. Canadian Patent rights for sale. For further particulars write the inventor, Miss L. C. Trethewey, 293 St. David St., Stratford, Ontario.

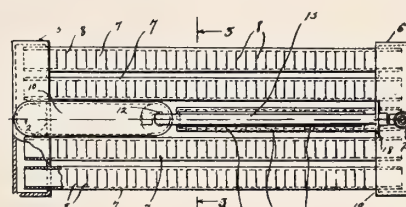
CANOE: This invention relates to improvements in a canoe, skiff or the like and comprises a plurality of gunwales secured at their ends to the usual stem posts, a plurality of ribs secured to the said gunwales, said ribs having a wide intermediate portion with parallel sides adapted to contact with the adjacent rib, and the bottom of said canoe would be entirely closed and the sides provided with a plurality of slots or openings formed between said ribs and a cover over said ribs substantially as described. For further particulars regarding sale of Canadian patent write Adolphe Yelle, Manufacturer of Canoes, Box 107, Leduc St., Hull, Que.



HORSE COLLARS.—This invention relates to an attachment for harness collars for draft animals and the principal object is to provide a device of the character described which will support the collar and hold its ends together. A further object is to provide a simple device, which may be attached to any type of harness collar and will prevent the breaking of the same at the draft. For further particulars regarding sale of Canadian patent write Mr. Kitt C. Clark, Hazemore, Sask.



BOLT AND NUT: This invention relates to improvements in bolts and nuts and consists in the combination with a bolt having a grooved shank, a nut screwed on the bolt, said nut having one of its sides channeled and provided with an opening between its bore and the channel; of locking means for the nut and bolt, comprising a spring finger that has a widened portion which frictionally contacts with the side walls of the channel and a detent carried by a reduced extension of the finger that passes through the opening in the nut and engages with one of the grooves of the bolt. Write the inventor, Mr. Takeo Miyagi, P.O. Box 324, Wai-pahu, Hawaii, who has Canadian and United States Patents for sale.



to provide a burner construction in which the flow of gaseous mixture is evenly controlled, and in which the pressure in the burner tubes is efficiently equalized. A further object is to provide a construction in which a portion of the generated gaseous mixture for the operation of the burner is stored, the stored portion being utilized to prevent any fluctuations in the flow of said mixture in the burner tubes, and also to prevent "back firing" during its operation. Mr. R. D. Horton, 134 E. Anaheim St., Long Beach, Cal., U.S.A., has United States and Canadian patent for sale.

HYDROCARBON BURNER. This invention relates more specially to a hydro-carbon burner construction adapted to be operated by cheap and inexpensive fuels, such as kerosene, distillates and like hydro-carbon fractions. An important object is

Harold C. Shipman & Co., Patent Attorneys, Ottawa, Canada

Transportation Department

(Continued from Page 74)

lished in 1914. To show what reductions are made by these decisions, the following comparison is submitted:—

Between Vancouver, Victoria, New Westminster, B.C.

AND		1	2	3	4	5	6	7	10
Glacier, B.C.....	(a)	2.11½	1.77½	1.41½	1.06	94½	81½	57	47½
	(b)	1.67	1.40	1.11	.84	.77	.65	.47	.38
Canmore, Alta.....	(a)	2.89½	2.40½	1.93½	1.43	1.30	1.12½	.78	.67
	(b)	2.25	1.08	1.49	1.13	1.01	.87	.60	.51
Calgary, Alta.....	(a)	3.05½	2.53½	2.03½	1.53	1.36½	1.20½	.84½	.70
	(b)	2.45	2.04	1.64	1.23	1.08	.93	.65	.56
Lampriere, B.C.....	(a)	2.11½	1.77½	1.41½	1.06	94½	81½	57	47½
	(b)	1.67	1.40	1.11	.84	.77	.65	.47	.38
Edson, Alta.....	(a)	3.10½	2.60	2.08	1.54½	1.40	1.22	.86½	.71½
	(b)	2.51	2.09	1.67	1.26	1.14	.98	.68	.57
Edmonton, Alta..	(a)	3.40	2.83	2.26	1.71	1.53	1.36½	.96	.80
	(b)	2.72	2.27	1.82	1.34	1.23	1.07	.74	.63
Lethbridge, Alta...	(a)	3.35	2.78	2.23	1.67½	1.53	1.33½	.94½	.78
	(b)	2.72	2.27	1.82	1.34	1.23	1.07	.74	.63
Medicine Hat, Alta.....	(a)	3.49½	2.94½	2.36	1.75½	1.58	1.41½	.99½	.83
	(b)	2.82	2.34	1.88	1.41	1.26	1.11	.78	.65
Winnipeg, Man.....	(a)	4.66½	3.79	2.92½	2.32½	2.06½	1.87	1.40	1.19
	(b)	3.99	3.33	2.61	2.10	1.86	1.74	1.22	1.02

(a) Present.

(b) Proposed, effective December 1st, 1921.

British Columbia Government present case to Railway Board for readjustment freight rates.

Commencing October 17th, at Vancouver, G. G. McGeer, representing the government of British Columbia, placed before the Board of Railway Commissioners evidence in support

of the application requesting removal of undue discrimination in freight rates alleged to exist in favor of other sections of Canada. The hearing in Vancouver extended over a period of four days and about twenty-three witnesses were called including the Premier of the Province, who gave evidence in a general

In order that all parties in other sections of Canada, particularly the Prairie Provinces, who are more directly interested, might have an opportunity of presenting any evidence in connection with this case, hearings were held in Calgary, Edmonton, Regina, Saskatoon and Winnipeg. From the evidence presented at the points throughout the Prairies it would appear that the various business interests in that territory are opposed to the application on the grounds that the rate schedules set out in the Western Rates case judgment 1914, were reasonable and are still in that position and that the advantages enjoyed by the business interests on the Pacific coast, namely, water transportation with low rates, should be considered as to some extent off-setting the natural disadvantage of the various mountain ranges in British Columbia.

Final argument in connection with this case will be heard in Ottawa, possibly sometime in January, although no definite date has as yet been fixed. As the railway companies have not so far presented any evidence in rebuttal or attempted to cross-examine the various witnesses present, it is safe to assume that they will have considerable to say at the final hearings at Ottawa. The various interests represented by the Winnipeg Board of Trade have retained Isaac Pitblado to act for them in connection with this case.

The Canadian Bond Crown Co., Limited, Montreal, of which S. H. Ewing is president, S. W. Ewing vice-president, and G. S. M. Davison, secretary-treasurer, have made arrangements with the National Seal Co., Inc., of Brooklyn, N.Y. to manufacture the "Duplex Seal" in Canada. This seal is suitable for use by druggists, varnish manufacturers, food and condiment manufacturers and makers of all kinds of pharmaceuticals.



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They're Safe—Whew—What a Relief!

PART I.—Night.

The night-worker—and a carelessly-tossed cigarette.

PART II.—Later.

A flicker—a sudden flare—then flame. Dense smoke from the second storey window. In goes an alarm—and the helmeted rubber-coats are on the job.

PART III.—The Aftermath.

Spattered walls—water everywhere—but in spite of disorder and confusion, *the records are safe.* That curtain of asbestos held the fort.

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You won't get an advance notice if fire visits you. It comes upon you stealthily and generally in the dark hours. You can't prevent it—but you can increase the "margin of safety" against its attack.

"Fire-Wall" Filing Cabinets are a pledge of better protection for business records. More than the rugged strength of steel commends them—for steel alone conducts heat. In "Fire-Walls" a curtain of asbestos, between two sturdy steel walls, stands between your vital business records and the sorry aftermath of fire's visitation.

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OFFICE AND FINANCE

The Formation and Management of a Special Library

EXPERT INSTRUCTS RECORDS ASSOCIATION

SOME seventy-five or eighty persons listened with a great deal of interest to the informative address report below. Toronto Branch of the C.M.A. at the invitation of the Records Association invited the members of its Executive, Educational and Research Committees to be present. After Mr. Walter had completed his address the meeting took the form of a round table conference and many questions were asked of and answered by the speaker.

The president called the meeting to order at 8.30 p.m., and in his introductory remarks enlarged on the benefits of the study classes at which instruction is given free by senior members of the Association. He also, in view of the large number of visitors who were present, spoke briefly on the objects of the Association, which are: "The advancement of record keeping"; "the study of the science of indexing and filing"; "the development of efficient methods"; "and the solution of the problems which may arise in these connections. In the course of his remarks he emphasized the importance of the work of the Association both to the employers and employees.

The president then introduced the speaker of the evening, Mr. Frank K. Walter, Librarian of the University of Minnesota, who has spoken at meetings of librarians and filing executives in Ottawa and Toronto.

Mr. Walter then addressed the meeting on the subject of: "The Formation and Management of the Special Library." He commenced by complimenting the Association on the work which it is doing, and stated that its objective should be of considerable educative advantage to the business community generally. He then referred to the breadth of the subject which he was asked to cover in one speech as, while each business library would in itself cover a comparatively narrow field, taking them as a whole, in the way he would have to do, they would embrace the entire field of modern industry.

Selection of Librarian Important

Mr. Walter pointed out that unfortunately in modern business houses the selection of a librarian was not given the consideration it merited, and that whilst experts and expert methods were used for the selection of not only the executive personnel but also the subordinate staff, the position of librarian was given to an office boy or junior stenographer as spare time employment.

In organizing a business library the librarian should come first, and it should be borne in mind that in selecting the librarian there would be two great difficulties: he might be too inexperienced or too experienced, for, if he were too experienced in library work, as such, he would be apt to place the library and the cataloguing before the immediate need of the business concern. The librarian should have a working knowledge of the business and take a keen interest in it; he should have the experience and sense of values necessary to determine the permanence of a record regardless of whether it be a bound volume or a pencilled memorandum, and to decide what matter was worthy of retention and what might be considered as a dead issue. Other qualifications which the librarian would need are tact and diplomacy.

Next to the librarian should be considered the absolute necessity of centralizing information where it would be so classified that it

would be readily available. The service must be prompt, and all data given, accurate. It should be borne in mind that a business executive "wants what he wants when he wants it", as information which might be of the utmost value at that time would be worthless half an hour too late.

The librarian of the business house must be what an efficiency engineer claims to be, and, unfortunately, very often is not, in that he fails in two points—he is neither an engineer nor is he efficient, and, far from producing efficiency, he produces disorganization.

Where proper care has not been taken in the selection of a librarian, the average business library is a disorderly heap of books and paper from which enterprising executives have snaffled" anything that is of real value for retention in their own desks.

In selecting material it should be borne in mind that the library is simply a working collection of data for the use of the firm; that books may constitute a very minor part thereof, and that clippings, maps, blue prints, etc., may practically constitute its entirety.

The perusal and treatment of periodicals is of prime importance, and it is part of the librarian's duty to foresee the value of information given and in many cases the reviews therein of books may be used as a means to obtain books which would be of permanent value. The routing of periodicals by a shifting list is recommended rather than by a permanent one, as, if a permanent one is used, a periodical may be sent to the office

of an executive who is away and may remain there until it has become valueless to others whilst it contains an article which, at time of publication, would have been of prime value to other executives. Thus the contents of each periodical should be carefully perused and only those articles which would interest an executive should be referred to that executive. Care should be taken that he does not retain it for such a long period as to inconvenience others who might be interested in other articles.

Public Libraries Aid Business

Mr. Walter then spoke of the great help public libraries can and do give to business libraries, and pointed out that when requested they will more often than not so classify their literature as to make all that should interest any firm quickly available for that firm, and that in many cases this service might be carried to an even greater extreme by paying for the cost of any special labor needed. The Library of the Society of Engineers in New York makes a specialty of this, and maintains an information service which covers, and serves, practically every country in the world.

Libraries of firms in a similar line of business can, in many cases; help one another; but great care should be taken by the librarian not to give away business secrets of the firm, and, when seeking information from other libraries; not to appear to pry into their affairs.

Experience is very necessary for the efficient classification of business library matter, and a tally list of subjects and cross references should be kept in index form but a catalogue will be more often than not unnecessary. The classification of data requires a great deal of careful thought and should not be attempted except with one of the standard classifications as a basis, as without these one may be easily led into grave difficulties. Experience could

The Canadian Association of Record Officers, the formation of which was reported in "Industrial Canada" at the time of its inauguration held a special meeting on Wednesday, November 16th. The principal speaker, Mr. Frank K. Walter, Librarian of the University of Minnesota, a consulting expert in business filing and sometime Librarian of General Motors, Detroit, gave the membership, which is representative of many lines of business, the benefit of his training and experience at considerable length. "Industrial Canada" presents on this page a condensed report of the proceedings.—The Editor.

Bank of Montreal

Established over 100 Years

Capital Paid up	-	-	\$22,000,000
Rest	-	-	\$22,000,000
Undivided Profits	-	-	\$1,501,646
Total Assets	-	-	\$517,403,162

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easily modify a Standard Classification to suit the special needs, but, inexperience may lead one to attempt a classification which will prove a failure.

The Dewey Decimal System is only applicable to general libraries, and would not be at all suitable for a business library, which might, owing to a reversal of policy of the firm, have to undergo a complete reclassification.

In conclusion, Mr. Walter emphasized that the librarian will be judged by results, as regards profits and loss, in exactly the same manner as any other member of the staff.

A vote of thanks was then proposed by Mr. W. L. Fleming and seconded by Mr. W. H. Hughes.

The president then asked Mr. H. Macdonald, secretary of the Toronto Branch of the Canadian Manufacturers' Association, to say a few words. Mr. Macdonald thanked Mr. Walter for his interesting address, and having expressed regret that the Honorary President of the Association, Col. Alexander Fraser, L.L.D., A.D.C., had unfortunately not been able to attend the meeting, congratulated the Association on the work which it is doing and emphasized the necessity of bringing before the public the value of this branch of industry, which is only too often not appreciated as it should be.

In closing the meeting, the president desired Mr. Macdonald to convey to the Canadian Manufacturers' Association the appreciation and thanks of the Canadian Association of Record Officers for its kind support at all times, and for the use of its committee rooms for executive meetings and instructional classes.

Outlook is Good

Favourable Report of National Steel Car Corporation, Limited, is Issued

An optimistic view is presented by the directors of National Steel Car Corporation, Limited, Hamilton, in the first report to shareholders issued since the reorganization of the company, which took place late in 1919. The report now issued covers the fiscal period of eighteen months from the commencement of business on January 1, 1920, to June 3, 1921. At the time the assets of the National Steel Car Company were taken over, the works were practically closed on account of lack of orders, but through efforts of the management, orders were secured by June, 1920, of approximately \$12,500,000. The greater part of this new business was obtained from Canadian railways: the balance for export.

It is pointed out by President R. J. Magor that, until the fall of 1920, both labor and material conditions were very severe. Besides, the works had to be thoroughly reorganized, and put into condition for maximum service. Therefore, normal operations were not resumed until October, 1920. The manufacturing results of the nine months ending June 30, 1921, are given as follows:—

Gross manufacturing profit\$602,927
Miscellaneous income 40,260

\$643,188

Deduct—

Depreciation\$135,627
Interest on mortgage bonds 84,886
\$ 220,513

Net profit\$422,674

Suitable comparisons with these figures are not available, owing to incomplete information in the company's recent reports.

Inventory of car department materials and also materials and finished products in the motor truck department were taken at cost, the President says, but, owing to uncertain and abnormal conditions in the material market, special and adequate provision has been made against any reasonable declines in values of both stocks and finished parts by a direct charge against the surplus account. Attention is called to a reduction in the amount of first mortgage bonds outstanding by the sum of \$180,000. A considerable amount of export business is expected in railway equipment, as it is said that no other Dominion within the Empire has as large a car manufacturing capacity as Canada. The motor truck business is also being developed, and branches established in different cities.

The balance sheet shows working capital of almost \$2,000,000, and current assets include more than \$1,000,000 in accounts and

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OUR Monthly Commercial Letter reviews the financial and trade conditions throughout Canada, with which our widespread branch system enables us to keep in close touch.

We shall be glad to mail this to you regularly, without charge, upon request.

The Canadian Bank of Commerce

Capital Paid up \$15,000,000

Reserve Fund \$15,000,000

bills receivable. A comparison of the principal items in the balance sheet, with a financial exhibit issued as at January 31, last, is as follows:—

	1921, June 30,	1921, Jan 31,
Current assets	\$4,948,906	\$5,167,832
Current liabilities	3,001,149	3,441,113
Working capital	\$1,947,757	\$1,726,719
Cash on hand and in bank	37,190	
Accts. and bills receivable	1,197,682	*1,508,434
Investments	7,867	2,810
Inventories	3,706,166	3,656,587
French and Mediterranean claims	273,477	303,477
Buildings, land, plant, etc.	3,186,727	2,947,115
Bank loans	1,827,373	
Accts. and bills payable, etc.	1,173,776	3,052,367
Total assets	8,471,770	8,146,582

*—Includes cash.

Bank of Montreal

Sound Financial Position is Shown by This Year's Annual Statement.

An excellent proof of the essential soundness of Canada's financial position is to be found in the annual statement of the Bank of Montreal just issued. As everybody knows, the year has been an exceedingly trying one in business all over the world, and although Canada has not experienced anything like the distress that many other countries have had to contend with, yet the general unsettlement which has accompanied this period of deflation has had a marked effect on the trade of the Dominion, and sharp declines in bank clearings have been a feature of the official monthly reports.

In view of this situation, the Bank of Montreal is to be congratulated not only on maintaining its traditionally strong liquid position, but on increasing its total of immediately available assets from \$289,146,508.34 a year ago to \$290,896,296.51 at the present time. The significance of these figures is apparent when considered in relation to the fact that in the period under review the Bank's liabilities have decreased by \$42,747,650.16.

This, however, is not the only evidence of the actual strengthening of the Bank's reserves in a period of unusual stress. The ratio of call and time loans to the total deposits has also materially improved in the Bank's favor. Thus whereas a year ago the total deposits exceeded the call and time loans by \$96,240,135.27, to-day the total deposits exceed the call and time loans by \$107,974,115.36.

In view of the deflation which has been in progress in business generally, the decline in deposits not bearing interest from \$111,739,215.02 to \$88,618,100.57 must be considered very moderate. The amount of savings deposits are a very encouraging feature of the report. They stand at \$317,935,871.38, as compared with \$322,578,613.54 a year ago, a difference of only \$4,642,744.16. As compared with the figures in the Bank's statement for the half year ending April 30 last, the present total of saving deposits is even more satisfactory, as they show an increase of \$7,089,384.13 for the half-year just closed.

The general statement of assets and liabilities shows total assets of \$517,403,162.69, as compared with \$507,199,946.49 on April 30 last.

The improvement which is revealed in the latter part of the fiscal year just closed is gratifying evidence of a general steadying in financial conditions after the violent reactions of the earlier period, and gives good ground for hope that the worst period in after-war reconstruction has been passed.

It is evident that the conservative policy of the Bank has enabled it to come through the trying period without unusual losses, and with the maintenance of the general level of profits. Despite the fact that a full year's interest has been paid on the increased capital, as compared with interest on the additional amount for the last half of the previous year only the full dividend of 12% has been maintained, as well as a bonus of 2%. The profits for the year amounted to \$3,949,796.58, compared with \$4,033,995 in the previous year.

The Imperial Optical Company, of Toronto are extending their ophthalmic lens department and will soon be able to make most of the ophthalmic lenses they use instead of importing them. The company report that their Kryptok factory and optical machinery departments have also been kept quite busy.



A Message to Canadians

ONLY by increasing the sale of Canadian commodities can we avoid increasing our foreign indebtedness. Never, even in war time, was it so essential to increase our exports.

A DUTY falls on manufacturers to produce articles of a quality and price that will compare favorably with foreign makes, and on our agricultural interests to increase production.

THE ROYAL BANK OF CANADA

Total Resources \$520,000,000

THE MERCHANTS BANK OF CANADA

Head Office, MONTREAL Established 1864

Paid-Up Capital.....\$ 10,500,000
Reserve Fund.....9,743,375
Total Deposits (April 30th, 1921).....154,911,487
Total Assets (April 30th, 1921).....190,367,409

President.....Sir H. Montagu Allan, C.V.O.
Vice-President.....F. Howard Wilson
General Manager.....D. C. Macarow
Supt. of Branches and Chief Inspector.....T. E. Merrett
General Supervisor.....W. A. Meldrum

How the Bank Serves



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Durant Stock Offered

Newly Incorporated Motor Company Stock Issues of \$1,500,000 is Made

An issue of the stock of Durant Motors of Canada, Limited, is being offered for sale at the price of \$10 a share. The issue is \$1,500,000 of an authorized capital of \$3,000,000. W. C. Durant and his associates have already subscribed \$750,000 of this issue.

The shares will be convertible on and after August 1st, 1924, and prior to August 1st, 1926, at the option of the holder into the capital stock of Durant Motors, Incorporated, the parent company in the United States, the conversion to be based upon the price of \$30 a share for Durant Motors, Incorporated, plus the premium, if any, in New York funds at that time, payable in stock of the Durant Motors of Canada, Limited, at the subscription price thereof.

Outlook is Better

Carriage Factories, Limited, Report Healthier Position at their Annual Meeting

Moderate optimism was expressed by President J. B. Tudhope, at the annual meeting of Carriage Factories, Ltd., held in the Standard Bank Building, Toronto, recently. There was a small attendance, but those present were gratified to hear that in the new lines undertaken by the company, particularly in the supply of bodies for motor cars and trucks, there is a fair outlook, and some good-sized orders are pending. One change was made in the directorate: Captain W. M. Weir of Montreal retiring and being replaced by J. R. Ryan of Ryan, Grier & Hastings, brokers, Montreal.

It was pointed out by Mr. Tudhope that, while there was an operating loss for last year, the company's position had been improved, substantially through the gradual sale of merchandise. There had been heavy writing off, and it was felt that the company was in a healthier position. While the outlook for dividends was not immediately bright, the directors were striving to protect the investment of the shareholders. A summary of assets, apart from goodwill, showed \$1,546,000, against outstanding preferred stock of \$1,162,000.

Authority was given the directors to dispose of the company's Brockville plant or part of it at their discretion.

Sea Sled Company

Manufacturers of New Type of Water Craft is Now Being Financed

An issue of \$1,000,000 of shares of the Sea Shed Company, Limited, incorporated under Dominion charter, is being offered by Balfour White & Company, Montreal, at a price of \$20 per share of par value \$25. The company are a branch of the Sea Sled Company who operate a plant at West Mystic, Connecticut, and own the license for manufacture and sale in Canada of a new type of water craft, known as the Sea Sled. After the present financing is completed it is the intention of the company to lease or buy a Canadian plant.

Directors of the company are:—Albert Hickman, president; C. R. Hosmer, Herbert Molson, Henry B. Plant, W. A. Black, J. W. McConnell and Hon. W. J. Shaughnessy.

Profits Have Declined

Annual Statement of St. Lawrence Flour Mills Company, Limited, Issued

The annual statement of the St. Lawrence Flour Mills Company reflects to some extent the unfavorable conditions that have pertained in the trade for the past year to August 31 last, the period of operation dealt with in the report. The profits for the twelve months are shown at \$147,801, as compared with \$215,077 a years ago and \$245,594 in 1919. In this connection the statement is similar to those of other companies operating in the same line of business.

After allowing for the payment of the bond interest, dividends on the preferred shares and \$14,641 for income tax to date, there remained \$20,450 for distribution among the holders of the com-

mon stock. This amount is equal to 6.7 per cent. on the common shares, and compares with 13.5 per cent. a year ago and 16 per cent. for 1919. The regular dividend requirement of 6 per cent. called for the disbursement of \$72,000. For three years the company has given its holders of the common stock an extra bonus of 4 per cent., and last year an additional bonus of 4 per cent., and the last year an additional bonus of 10 per cent. was also given. During the year to date bonuses on the common stock were reduced to 2 per cent., and \$15,550 was taken from the balance at profit and loss to bring the balance of net profits over all charges up to \$96,000 required to pay the 6 per cent. dividend and the 2 per cent. bonus.

The surplus to be carried forward for the year thus stands at \$382,279, as compared with \$397,829 a year ago, and \$322,263 in 1919. The balance sheet shows a reduction of \$65,172 in the company's working capital. Real estate, buildings and plant show an increase of \$431,073 to \$645,048 and the special account, including goodwill, is unchanged at \$1,200,000. Accounts receivable are set at \$116,870, a decrease of \$15,421 as compared with the figures of a year ago. Inventories of \$283,881 are lower by \$112,425. The company's investments remain unchanged at \$362,100, and a gain of \$2,435 to \$2,611 is noted in cash on hand.

The outstanding feature of the statement of current liabilities is an increase of \$45,188 in bank loans, which are set at \$354,527. Accounts payable are increased by \$28,584 to \$49,671, while an item termed sundry credits shows a satisfactory reduction of \$57,495 to \$13,758.

Dullness in Shipbuilding

Lower Profits Turn Port Arthur Shipbuilding Company, Limited, to Other Fields

Dullness in shipbuilding is reflected in the annual report of the Port Arthur Shipbuilding Co. for the year ended June 30. Net earnings were \$61,909, compared with \$301,214 in the previous year. Gross profit from operations was \$216,070 against \$538,369. "Considering that we have secured no contracts for new vessel construction this year," says President James Whalen, "the company is fortunate in being able to show even a small net profit. The only vessel construction done during the year was the completion of two freight steamers of approximately 4,000 and 3,000 dead-weight tons respectively, commenced last year.

The company has definitely entered into the building of pulp and paper-making machinery and equipment to supply what is considered a need for one of Canada's principal industries. The company have also decided to manufacture low-pressure boilers for heating purposes, having in mind especially the market in Western Canada. Port Arthur is considered a good location for such an industry, being close to the western market, and being able to bring in materials by both. A boiler shop with machinery and tools to build this class of boiler is already equipped, and the company expect a large and profitable business therefrom. During the year, preferred stock having a par value of \$93,200 was retired, also \$60,000 of mortgage bonds.

The Montreal Cottons, Limited, are enlarging their yarn manufacturing plant to make yarn of the finest counts for sale to the trade.

Position Wanted

Works manager, with twelve years' experience in the United States as Production Engineer and Works Manager, desires similar position with live Canadian manufacturing company. Address Box 237, *Industrial Canada*, Canadian Manufacturers' Association, Incorporated, Publishers, Toronto, Canada.

Process Engineer

Experienced in erecting and installation of processing plants, both chemical and industrial, open for employment. Best of references. Apply Box 236—"Industrial Canada."

Insure Their Employees

Boeckh Co., Limited, Toronto, Latest Company to Adopt the Plan of Group Insurance

The Boeckh Company, Limited, Toronto, have completed arrangements for the insurance of the lives of their employees. The insurance amounts in each case to \$1,000. It remains in force as long as the employee continues with the company, although he may continue it at his own expense should he for any reason leave the concern. It is without expense of any kind to the individual covered, the entire cost being borne by the Boeckh Co. No medical examination is required. The employee names his beneficiary in the same manner as he would under an ordinary policy, and has the privilege of changing this person from time to time, as circumstances may demand.

The plan provides benefits in case not only of death but of total permanent disability. In the event of an employee becoming totally and permanently disabled before reaching the age of sixty, he will receive the full amount of his insurance certificate in either annual or monthly instalments, according to any one of several plans which he may choose. If death should occur during this period, the remaining instalments will be paid to his beneficiary. Benefits of visiting nursing service apply.

Price of Newsprint

Canadian Export Paper Company, Montreal, Announce Reduction of \$5 a Ton

The Canadian Export Paper Company, Montreal, have officially announced a price of \$75 a ton for newsprint sold under contract for the first quarter of 1922, a reduction of \$5 a ton from the current price.

The company further announce that their reorganization plans, recently undertaken, are now complete and that E. L. Crooker, of the Laurentide Company is in charge of the Company's affairs, assisted by a permanent board of management representing Price Brothers & Company and the Brompton Pulp & Paper Company. The re-organization was brought about by a desire to bring the mills which export products through the company's agency into closer relationship with their customers.

The company now control for export purposes some 800 tons of newsprint a day, the output of three of the largest and best equipped mills in Canada. This enormous tonnage enables them to undertake the entire requirements of even the largest consumers of newsprint without inconvenience or risk of disappointment, while the company's extensive operations also make possible the economical handling of their products and the prompt solution of any emergencies that may arise.

Mr. Crooker, the manager in charge, has long been associated with the paper business, and for several years past has been sales-manager for the Laurentide Company, Limited, in which capacity he has represented the company both in the United States and Great Britain, as well as in Canada. He has an extensive acquaintance with newspaper publishers in all three countries.

Luxurious Steam Yacht

Sea King Has Been Completed by the Nova Scotia Steel and Coal Company

The handsome two-funnel, steel steam yacht, Sea King, built for Baron Bliss, Nassau, Bahama Islands, has been completed by the Nova Scotia Steel & Coal Company, at their yards in Trenton, Nova Scotia, and will soon leave for the south. Competition was keen to get the contract for this boat, and the Nova Scotia company was able to secure it against several British and United States firms that submitted tenders.

The yacht is 147 feet over all, 26 feet 6 inches beam and 12 feet deep. Her two 350 semi-Diesel engines will give her a speed of 11 knots and her shallow draft will enable her to proceed far up the rivers of South America. The decks are of teak wood and the furniture and pannelling are of mahogany and other valuable woods. All the work has been done by carpenters regularly employed at the plant and the result is a credit to Canadian workmanship.

Foreign Service at Canada's "Gate to the Orient"

The Union Bank of Canada placed a branch of its foreign Department in Vancouver because of this city's strategic position at Canada's gateway to the vast markets of the Far East.

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Deaths Among Prominent Manufacturers

THE month of November witnessed the passing of five leading figures in the industrial life of Canada. R. B. Emerson, the associate of W. S. Fisher, president of the C.M.A., in the firm of Emerson & Fisher, Limited, St. John, New Brunswick, was one of the pioneer manufacturers of the Maritime Provinces. To Robert McLaughlin the town of Oshawa, Ontario, owes much of its prosperity and Canada, the development of one of her largest industries. Sir Frederick Orr-Lewis, founder of Canadian Vickers, Limited, received his baronetcy in recognition of war services rendered by his shipbuilding activities.

As *Industrial Canada* goes to press the deaths of Sir Douglas Cameron and Hedley Shaw, president and vice-president respectively of the Maple Leaf Milling Company, Limited are reported. Life-long personal friends, and business associates for many years, these men died within a day of each other and were both buried on December 1st.

Sir Frederick Orr-Lewis

Death of Founder of Canadian Vickers, Limited, in his Sixty-first Year

The death of Sir Frederick Orr-Lewis at his residence in the south of France was reported by cable on November 18th. He was in his sixty-first year and had been in failing health since the sinking of the *Lusitania* when he was immersed in the sea for several hours and was rescued in a state of total collapse.

Sir Frederick was born in Hamilton, Ontario, in 1861 and commenced his commercial career at an early age. In 1887 with two of his brothers he established the business of Lewis Brothers in Montreal.

In 1909 he founded Canadian Vickers, Limited, of which he was president at the time of his death. Through that company he was also associated with the parent firm of Vickers, Limited, in England. He was a director of the Merchants' Bank of Canada, the Bankers' Trust Company, the Montreal Cotton Company and Canada Steamship Lines.

His baronetcy was conferred in the New Years' honors of 1920 in recognition of special war services, more especially in connection with his shipbuilding activities.

Robert McLaughlin

Founder of McLaughlin Carriage Company Dies in his Eighty-sixth Year

Robert McLaughlin, founder of the McLaughlin Carriage Company, died on November 23rd at his home in Oshawa, Ontario, following a short illness. He had just passed his eighty-fifth birthday.

The veteran manufacturer was born near Peterborough, Ontario. In 1867 he commenced manufacturing carriages at Enniskillen, Durham County. For the first few years he had an uphill fight, but in 1877 he was able to move to Oshawa and erect a new plant. This was totally destroyed by fire in 1899, but Mr. McLaughlin immediately decided to rebuild and expand.

In 1905 the McLaughlin Company successfully undertook the manufacture of motor cars. In 1919 they were merged with Oshawa's largest industry, the General Motors Corporation of Canada, Limited, of which his son, R. S. McLaughlin, is president.

The late manufacturer at one time served as mayor of Oshawa. He was a director of the Western Bank up to the date of its merger with the Standard Bank. His public spirit and wide charity made him greatly beloved by his fellow citizens, by whom and by all who knew him his loss will be deeply regretted.

Robert B. Emerson

Head of Emerson & Fisher, Limited, Dies at St. John, New Brunswick.

Robert B. Emerson, the associate of W. S. Fisher, president of the C. M. A., in the firm of Emerson & Fisher, Limited, St. John, New Brunswick, died at his home on November 12th at the age of

seventy-three. Mr. Emerson was a lifelong resident of St. John, where he was born in 1848. In 1870 he started in business for himself and eight years later formed a partnership with Mr. Fisher. Under their joint management the business grew to its present large proportions. For several years he was prominent in the public affairs of his native city, sparing no effort in the furtherance of its welfare.

The *St. John Globe*, referring editorially to the late manufacturer, says: "Than R. B. Emerson, whose death is sincerely mourned, St. John had no citizen who more conscientiously undertook and more conscientiously carried on the responsibilities which citizenship brought to him. The head of a large and successful business, Mr. Emerson long ago realized that his obligations to the community were larger than the four walls of his business office. Without stint of time or money he took up those larger obligations as they came to him, and to many community movements, both of a permanent and a transient character, gave time, advice and actual hard work. The Board of Trade, the School Board, the Home for Incurables, the Natural History Society (of which he was the president) are among the many public institutions which benefited from his generosity of both money and time. But no list of Mr. Emerson's activities could be complete, as they go back over a long period of years and cover practically all of the efforts St. John has made within the period of his business life to establish its commercial prosperity and to further its educational and humanitarian advancement.

Hedley Shaw

Vice-President and Managing Director of the Maple Leaf Milling Company, Limited

On November 29th in Toronto there passed away one of the outstanding figures of the Canadian milling industry, in the person of Hedley Shaw, managing director and vice-president of the Maple Leaf Milling Company, Limited. He was also president of the Hedley Shaw Milling Company, Medicine Hat, Alberta, and of the Port Colborne and St. Lawrence Navigation Company, and vice-president of the St. Mary's Cement Company, Limited.

Mr. Shaw was born near Hamilton in 1866 and educated in Brantford, Ontario. From 1884 to 1888 he worked as an apprentice in a small mill near there, after which he commenced business in his own name, remaining in Brantford until 1893. He also purchased the mills at Oakville, Ontario, with Thomas Foulds. In 1898 he bought out his partner's interest and formed the Hedley Shaw Milling Company, Limited, which acquired or built mills at St. Catharines, Thorold and Port Colborne, Ontario. In 1908 he amalgamated with the Maple Leaf Flour Mills Company at Kenora, Ontario, and acquired their elevators. In 1910, the Maple Leaf Milling Company, Limited, was formed, with Mr. Shaw as managing director. They now own and operate fifty elevators in Western Canada and many warehouses and mills in both the East and the West.

Sir Douglas Cameron

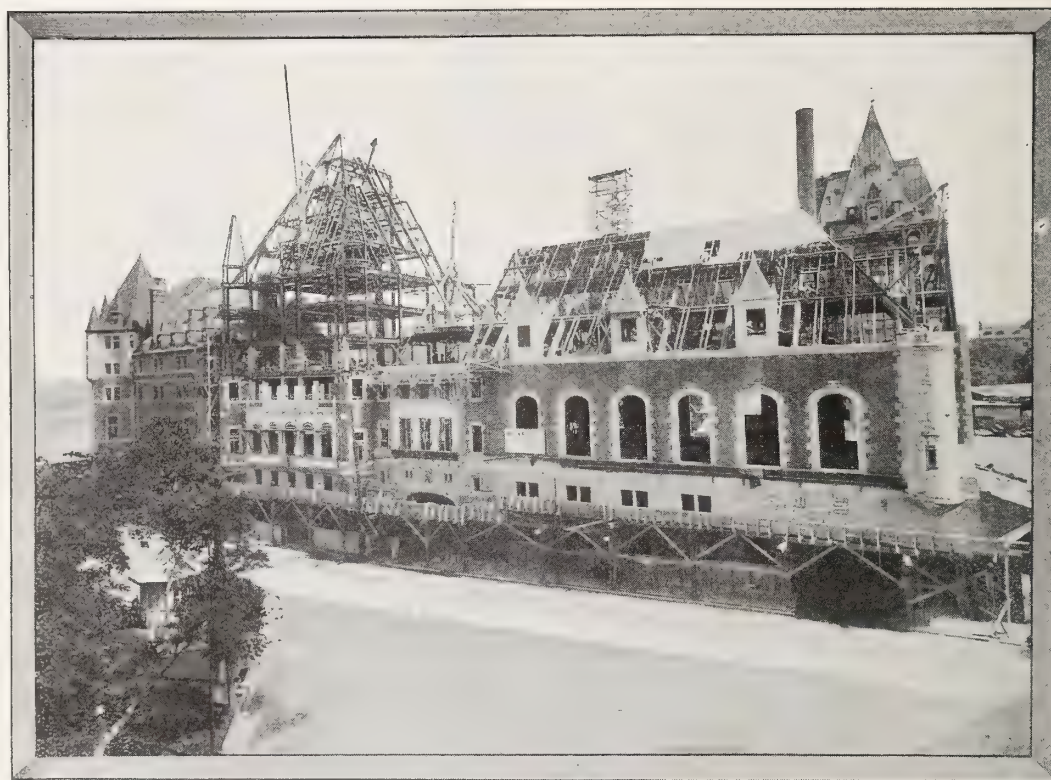
President of Maple Leaf Milling Company and former Lieutenant-Governor of Manitoba

The death occurred in Toronto on November 27th, of Sir Douglas C. Cameron, K.C.M.G., president of the Maple Leaf Milling Company, Limited, and former Lieutenant-Governor of Manitoba.

Sir Douglas was born in Prescott County, Ontario, in 1854 and was engaged in farming in Ontario from 1871 until 1880, when he went to Winnipeg. In 1883 he entered the lumber business there under the firm name of Cameron & Company. About 1892 this became the Rat Portage Lumber Company of which Sir Douglas remained president until his death. He was identified with numerous other business enterprises and had large timber holdings in British Columbia.

In 1902 he was elected to the Ontario Legislature for Fort William and Lake of the Woods but was defeated in 1905 and 1908. He was a councillor and later mayor of Rat Portage. He was appointed K.C.M.G. in 1913 while Lieutenant-Governor of Manitoba. His tenure of the latter office lasted from 1911 to 1916.

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A RECORD OF PROGRESS

Twelve Hundred Ton Marine Railway

Sydney Foundry and Machine Works, Limited, Make Important Addition to Ship Repair Plant

EARLY in September a marine railway, the latest addition to the ship repair plant of the Sydney Foundry and Machine Works, Limited, was completed and when the cradle was launched for the first time to test the working of the machinery everything worked without a hitch. The owners were highly pleased with the railway's first performance and are now ready to receive ships and execute repairs.

The new Sydney Marine Railway is one of the most modern, up-to-date plants of this kind in Eastern Canada. The work was started in March of this year, and has cost within the vicinity of \$100,000. Engines, boilers, hauling machinery and all iron work were made by the Sydney Foundry & Machine Works, Ltd., and no expense has been spared to make this the strongest and most convenient plant of its kind. The cradle will accommodate a ship 230 feet in length and is 50 feet wide; it has a lifting capacity of 1200 tons dead weight. The cradle is submerged to a length of 500 feet and has a depth of water over keel blocks of 17 feet aft and 11 feet forward. The time required to haul a ship of the railway capacity after being grounded on the keel blocks is twenty minutes; the empty cradle can run back in nine minutes. Special attention has been given in the building of this cradle to allow for taking on extra heavy concentrated loads such as dredges, floating derricks, etc. There was also special provision made for unshipping rudders and taking off propellers, etc.

In connection with the marine railway, the company have a well equipped wood working and carpenter shop, air compressors, both steam and electric; an electric welding plant of the most modern type; electric drills, large steam pumps, hot water heating apparatus for removing ice, and all other equipment to make this one of the most up-to-date plants where cleaning of ships, painting and repairs can be made with the

greatest despatch. The company are also equipping a large steam floating derrick for use in handling boilers and heavy machinery.

The company's tug boats are always at hand to assist vessels in and out of the dock, and ready at all times to go to the assistance of vessels in distress. At the time of writing, the Electric Company's largest ferry boat is now on the marine railway undergoing a general over-hauling, putting on sheathing and preparing for the winter work.

The company some time ago made application to the Dominion Government for subsidy on the building of a floating dry dock of the 2nd class, under the "Dry Dock Subsidy Act", a special act passed for the encouragement of building dry docks in Canada; and having successfully complied with all the requirements of the act, are awaiting the action of the Government to start operations. In the meantime they are spending large sums on the building of the water front, constructing wharfs and making preparations for the building of and operating this dock.

The company have already booked a large amount of work and there is every reason to expect that the new addition will prove a profitable one, and will help in removing the unemployment in that part of Canada.

The Lumber Industry in Northern Manitoba

Writing in the Manitoba Free Press, Reece H. Hague gives an interesting account of lumbering operations in Northern Manitoba, particularly in connection with the work of the Pas Lumber Company, which conducts the largest lumber mill between the Great Lakes and British Columbia. This company bought out, in 1919, the Finger Lumber Company, which had started operations on a small scale in 1911. The plant

was rebuilt, enlarged and modernized by the new owners and is considered one of the most up-to-date plants in Canada.

The mill is situated on the Saskatchewan river, about one mile from the town of The Pas on the outskirts of what is known as Fingerville, taking its name from Herman Finger, who first established the lumber industry in The Pas, securing large tracts of land off the Carrot River in Saskatchewan. There is sufficient merchantable timber on the company's tracts to last for several years, even with the present high annual cut.

A large boarding house is situated near the mill with accommodation for 120 men. Each room contains two single beds. Recreation halls, steam heat and electric light are included among modern improvements. In addition, the company has 35 houses for married employees and more are contemplated.

All supplies for the camps are sent from the lumber company shipping on ice in The Pas by water during the summer, several boats being engaged. The company has quite a fleet of boats of various sizes, including two large steamers, utilized in bringing log booms to The Pas and taking supplies to the warehouse on the Carrot River, a pile driver boat and a number of gasoline launches.

In addition to large quantities of lumber for various purposes the company manufactures numbers of grain doors and there is a continuous stream of cars leaving the siding at the mill and connecting up with the train leaving for the south.

The principals are the same as those who were interested in the Prince Albert Lumber company, Prince Albert; and the Ladder Lake Lumber company, Big River, Sask. Both the latter companies have discontinued operations and the trade connections formerly enjoyed by them have been continued by The Pas Lumber company.

The value of lumber production in Northern Manitoba in 1919-1920 was \$1,000,000 and indications point to it being considerably greater when the lumber market improves. In the meantime The Pas Lumber company affords employment for large numbers of men and is the most important factor in the prosperity of Northern Manitoba.



Side View of Marine Railway and Head House



End View of Cradle and Track

New Amherstburg Industry

Mid-Western Tractor Wheel Company to be in Operation by Next July

The town of Amherstburg, Ontario, is receiving a new industry, the Midwestern Tractor Wheel Company, who are establishing a plant there and are endeavoring to have everything in readiness to start operations by July 1st, 1922. The plant will be 200x400 feet, one storey, of steel and concrete construction and will be capable of producing 150 sets of Midwestern tractor wheels in an eight hour working day. It is estimated that four hundred and fifty hands will be employed.

The company's product is a tractor wheel, the design of which is protected by two comprehensive patents in the United States, while Canadian patents duplicating these are pending. The patents have been duly assigned to the company.

The site chosen in Amherstburg is advantageously located, being 2,700 feet from the harbour and five blocks from the Michigan Central Station. The original sub-division on which the plant will be built comprised 72½ acres, which after allowing for streets, etc., cut up into 438 lots. Of these 21 have been sold and the company's present holding is 417.

Capitalization of the company is \$1,000,000. The officers are: E. Edmiston, president; T. H. Fox, 1st vice-president; Chas. A. Cuddy, 2nd vice-president; J. G. Prance, treasurer; A. E. Carpenter, secretary. In addition to these, H. H. Lane is a director. The production manager and chief mechanical engineer is Glen J. Walker, who has had many years' executive experience in motor factories in the United States.

Important Brockville Development

Eugene F. Phillips Electrical Works, Limited, to Move Their Montreal Plant

The Eugene F. Phillips Electrical Works, Limited, who now manufacture a complete line of wires and cables for all electrical purposes in Montreal have acquired at Brockville, Ontario, a

site of about 130 acres. In the early spring they intend to erect there a copper rod rolling mill with a capacity of 100 tons a day which they expect to have in operation next summer. Ultimately they propose to move the whole of their present Montreal plant to the same site.

The new plant will have a considerably greater capacity than their present factory, and will include all the most modern types of machines for insulating wires and cables. The rod mill will be capable of producing the largest sizes of round and flat rod as used in the electrical industry, while the wire mill will handle all sections of shaped copper in addition to the usual sizes of wire. When completed the plant will probably give employment to 500 or 600 hands.

At the present time it is impossible even to estimate the cost of construction, but no expense will be spared to make the plant the most modern and complete of its kind.

The plant will be entirely electrically operated, power being taken from the Ontario Hydro Power Commission at a pressure of 44,000 volts. This power is generated at Cedars Rapids, and transmitted over the Hydro lines from Cornwall.

The water required for the rolling mill and factory will be pumped by the company from the St. Lawrence River which adjoins the property, and a standby will be provided by the town in case of emergency.

Alliance Brass Company

Have Rented Peterborough Plant and Preparing to Start Manufacturing

The Alliance Brass Company, Limited, capitalized at \$75,000, have rented a building on Hunter Street East, Peterborough, Ontario, and are installing machinery and preparing to turn out valves and other brass goods. Montreal men who have had a long experience in this line of manufacturing are interested in the company. The factory being used is a building 100x28 and 40 feet.



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Round Iron Frame

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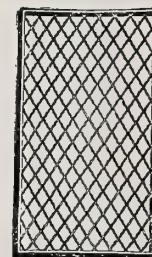
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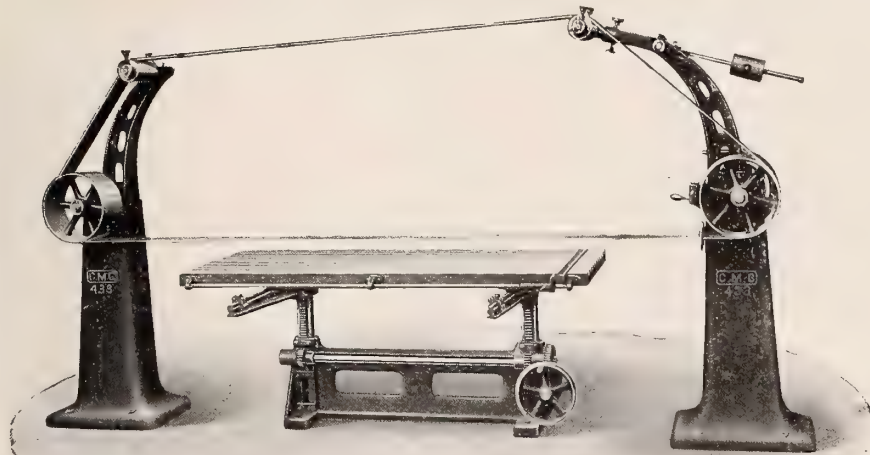
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Utilizing Fir Cones—a New Industry for British Columbia

MONEY from fir cones is the latest development of the forest resources of British Columbia. The Dominion Government Forestry Branch has completed a building on the wharf at New Westminster, where special machinery is being installed for extracting the seeds from cones, says the *Vancouver Province*. The machinery has been specially devised for the work and invented by Mr. W. C. Mobley, chief fire ranger in the Salmon Arm district, who is a skilled mechanic and has shown his inventiveness in designing machinery to do this work, for which there is no parallel, either in Canada or the United States.

Already some of the machinery has been tested and found successful, but it is not expected that the plant will be in full operation for a few days. When in operation it will employ six men in three shifts of eight hours each. The staff will be selected from the fire rangers in the employ of the Government.

It is expected that the machinery being installed will extract the seed of the cones at the rate of from forty to fifty sacks every twenty-four hours.

Mr. D. R. Cameron, of Kamloops, Inspector of Forest Reserves, under whose direction the work is being done, is optimistic with regard to the whole scheme and expects good results from the operation of the plant. He has seen to the collection of the cones under the direction of the various fire rangers of the department.

Already there are stored in New Westminster about 2,000 sacks of cones, nearly all of which are fir. These are being cared for to prevent mildewing and heating.

When first received, the cones are spread out for several days to dry, and are frequently turned over so as to allow the air to reach all parts. After the drying process is completed they are resacked and stored in racks in the new building.

In the Fraser Valley it is expected there will be gathered about 3,000 sacks of fir cones and 300 sacks of hemlock. The spruce cones are being collected from the northern part of the Province in the vicinity of Massett and Prince Rupert. About 3,000 sacks of this species will, it is expected, be gathered, and the full shipment of about 1,500 sacks will arrive about the middle of the present month.

The price paid for fir cones is \$2 per sack; spruce, \$1.50, and hemlock, which is a very small cone, \$6.

The department requires the sacks to be thoroughly filled, sewn, not tied.

The picking of the Fraser Valley has been done largely by women and children, although in some cases men found that they could, by working hard, earn a fair day's pay in this new and interesting industry.

The accounts are all paid by Mr. E. Walmsley, of the Dominion Timber Office, who reports that the greatest interest has been aroused in this work, not altogether from the standpoint of providing employment, but the fact that the value of the forest tree has been brought home to many people who previously looked upon it as something to be destroyed as speedily as possible.

Some of these people now find that the fir and hemlock trees on their uncleared lands are more valuable than the apple tree in the orchard, and on market day for some weeks past it was quite a common sight to see the farmers' autos or wagons, partially or wholly loaded with cones which the department accepts and immediately pays for, if found in good condition.

Will Make Springs

Canadian Lever Springs, Limited, Peterborough, Have Received Their Charter

Canadian Lever Springs, Limited, Peterborough, Ontario, have received their charter and will carry on the manufacture of automobile springs in the plant of the Peterborough Machine & Lubricator Company. E. R. Wilson of the latter company is manager of the new enterprise.

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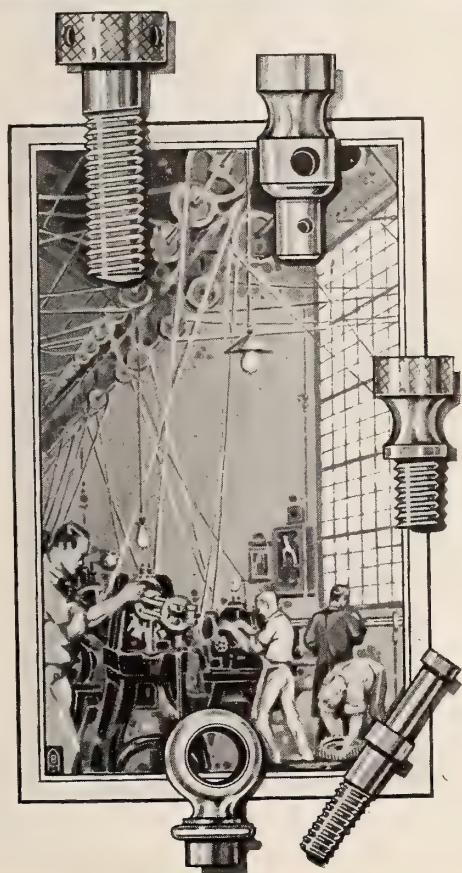
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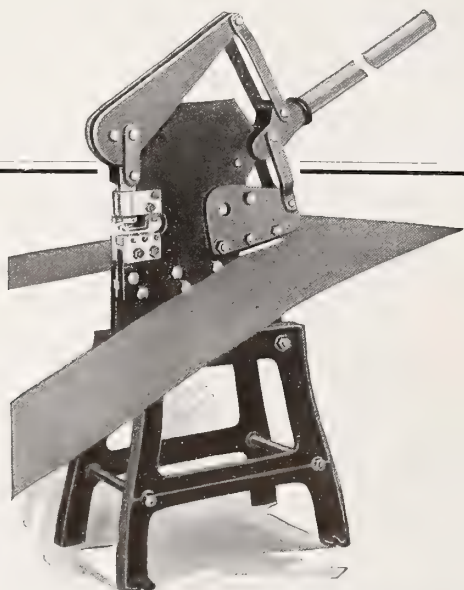
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New Tire Factory

Construction Started on Plant of Red Arrow Tires, Limited, Peterborough, Ontario

The first sod for the factory building of Red Arrow Tires, Limited, was turned in Peterborough on November 19th by Alderman J. J. Turnbull, president of the company, in the presence of a large number of people. The contract for the erection of the building has been let to J. E. Hayes & Son, and the work is to be pushed so that the company will have tires on the market in the spring.

The building will be 205 feet long and 60 to 90 feet in width, with two storeys and basement. The company have received their charter which authorizes a capital of \$2,000,000.

The company expect to be in operation by April, 1922, and will employ from four to five hundred men when in full production. The plant has a capacity of 500 automobile tires and 500 tubes a day.

Officers of the company are:—J. J. Turner, president; G. A. Gillespie, vice-president; J. R. McDonald, secretary; and P. P. Westbye, treasurer. The above are all prominent business men of Peterborough. The fifth director is Joseph Rath of Durant Motors, Buffalo, N.Y.

Birmingham Motors, Limited

Have Leased Plant of Henry Hope & Sons, Peterborough, With Option of Purchase

Birmingham Motors, Limited, have leased with an option to purchase the building on the Monaghan Road, Peterborough, Ontario, formerly occupied by Henry Hope and Sons. The building is 287x282 feet, saw tooth roof construction. Some men from Jamestown, N. Y., are promoting the new company.

Have Completed Addition

Alsip Brick Tile & Lumber Company, Limited, Now Making Hollow Tile.

The Alsip Brick Tile & Lumber Company, Limited, Winnipeg, have just completed an addition to their plant in the nature of a dryer for the hollow tile which they have commenced manufacturing in Winnipeg. The addition is approximately 200x50 feet.

Hitherto the majority of hollow clay building tile that has been used in Winnipeg has been imported from the United States or Alberta, and it has not been found satisfactory to manufacture it in Winnipeg. The Alsip Company have spent many years in experiments on this product and have at last perfected their plant. The new hollow tile has been on the market since August last and is giving every satisfaction.

Owing to the severe weather of Western Canada the manufacturing season has been limited to the time during which the ware can be divided in open racks. The new dryer will enable the company to continue manufacturing well into the winter, and will enable them to recommence at least a month earlier in the spring than they could normally do.

Besides manufacturing tile the company are also large manufacturers of common brick, making as many as 24,000,000 brick a year. The tile is an entirely new line but their experiments have convinced them that its manufacture is practicable and they expect soon to be in a position to supply it to the whole market of Winnipeg and district.

Business Reorganized

Vawter-Luckett, Limited, Takes Over Business of Luckett Loose Leaf, Limited

Luckett Loose Leaf Limited, 545-549 King Street West, Toronto, announce the sale of their business to a new company organized for that purpose. The new corporation will be known as Vawter-Luckett, Limited, and will consist of Frank M. Vawter, who for 28 years has had active charge of the Baker-Vawter Company of Benton Harbor, Mich., and Holyoke, Mass., and Jas. S. Luckett, founder of Luckett Loose Leaf, Limited.

The plans of the new company include a complete new catalogue, new manufacturing equipment, larger stocks and concentration on all the details of manufacturing loose leaf in Canada, to give the trade a better product and a complete line. The new company are an independent organization with no connection with any other company in Canada or the United States.

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New Boiler Plant

Canada Paper Company, Limited, Make Extension to Their St. Thomas Mill.

The Canada Paper Company, Windsor Mills, Quebec, have just put into operation a new boiler plant in connection with their St. Francis mill. The boiler house is of brick and concrete with concrete roof and was erected by the Newton Dalvin Construction Company of Sierbrooke. It contains three 250 h.p. Goldie & McCullough water tube boilers and has room for a fourth.

The boilers are equipped with super heaters and are fired with type E stokers supplied by the Combustion Engineering Company. They are backed with green economizers. The draft and economizer fan are operated by motors, and the boilers are equipped with Bailey air and steam motors.

The boiler house is equipped with concrete coal storage bins, the coal handling equipment being supplied by the Canadian Link Belt Company.

Open New Plant

Hall, Dent (Canada), Limited, Manufacturing Silk Hosiery in Barrie, Ontario.

Hall, Dent (Canada), Limited, manufacturers of silk and fabric gloves, cotton and glove silk cloths, etc., Toronto, have opened a new plant in Barrie, Ontario, for the manufacture of full fashioned glove silk hosiery. They started operations there recently with a force of ten hands and expect to employ about twenty-five in the course of time. The company now have five factories, two in Toronto, one in London, Ontario, one in Zurich, Ontario, and the Barrie plant.

Make New Product

Flexible Shaft Company, Limited, Add Stewart Industrial Furnaces to Their Line

The Flexible Shaft Company, Limited, Toronto, who are the Canadian branch of the Chicago Flexible Shaft Company, are now fully equipped for the manufacture of Stewart industrial furnaces

for all heat treatments of metal, including porcelain enamelling, and for use with liquid or gaseous fuels. New linings and other repair parts for Stewart furnaces now in use, as well as pyrometer equipment and Stewart positive pressure blowers, can also be supplied.

New London Industry

London Concrete Machinery Company Purchase Ideal Concrete Machinery Co.

The London Concrete Machinery Co. of London, Ontario, have purchased the business of the Ideal Concrete Machinery Co. of Windsor and are moving the entire plant to London. The Ideal line consists of the Ideal concrete block machine, Ideal power tamper and ornamental moulds.

The Ideal concrete block machine was the first concrete block machine placed on the market, making the face of the block in the bottom of the mould, allowing the blocks to be faced with richer material. It was the first to use a horizontally withdrawn core. This company controls the basic patents covering these features, also many other patents in block making machinery.

The London Concrete Machinery Co., who already have a very large business in the well known London line covering concrete mixers, hoists, pumps and other contractors' equipment, are making provision for greatly increasing the output of Ideal concrete block machines. Their new catalogue covering this line will be issued about December 1st and will be mailed on request.

Opening New Studio

"Sprad" Showcard Studios, Montreal, to Make Theatre Curtains and Scenery

E. Lewis, principal of the "Sprad" Showcard Studios, Montreal, better known as "Sprad—Inkspreader and Cartoonist," is planning to open a large studio for the purpose of painting theatre curtains and scenery. Details are not yet completed, but as much of this work is at present done in the United States it is expected that a Canadian studio will satisfy the requirements of those who prefer to purchase their goods at home.

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Precautions Against Freezing of Fire Appliances

(National Fire Protection Association)

BE sure that engineer or supervising employee is fully posted as to the purpose and intention of every valve and pipe of the sprinkler system. It is also essential that the night watchman should understand the operation of all valves and the importance of giving proper and prompt alarm.

1. See that all portions of buildings are properly heated at all times to prevent freezing in any of the sprinkler pipes, particular attention being given to exposed places such as hallways, entries, stair towers, elevator shafts, show windows, shipping rooms, attics, roof monitors and skylights, and spaces between ground and first floor and under sidewalks.

Entire systems have been rendered inoperative through neglect of such locations. To be safe from freezing a temperature of at least 40 degrees Fahrenheit should be maintained.

2. Examine tanks and all pipes, fittings and valves, whether for steam heating, general water service, or fire protection. See that none is frozen or has been frozen, and that they are all in operative condition; and where there is any liability of freezing, provide the necessary protection.

Besides seeing that tank heaters are in proper order it is important to make certain that they are of adequate capacity for the tanks they serve. Both heaters and circulating pipes should be cleaned of any rust or sediment.

Tanks should be cleaned and tank supports properly painted.

3. Examine carefully and provide suitable boxing around any pipe lines which may be in exposed locations (either between ground and first floor, between buildings, or near windows, etc.) Make frequent tests during the winter in order to make sure the piping is free from frost.

Open joints or gaps in the boxing are a prolific source of trouble. It is essential that all such defects be discovered and

remedied forthwith. Joist channels and tank platforms are places of special danger in this respect.

4. See that sprinkler dry valves are in working order, not leaking, and that alarm connection and gong are in operative condition. Should a valve trip and, without giving an alarm, admit water into the pipes where it may remain undiscovered, freezing is liable to occur with disastrous results.

5. Make sure that piping in dry systems is thoroughly drained and that the system holds air pressure well. All pipes should drain back to the dry valve. In cases where this is impossible drip valves should be installed at low points, and these should be carefully watched during cold weather. Drip valve outlets should be plugged as a safeguard against leaking or tampering.

6. Dry-pipe valve closets should be properly constructed and permanently heated, preferably by steam, electric heater, or gas heater with flame properly protected. Lanterns and oil stoves, if used in emergency, should receive constant and careful supervision; the hazard of heaters of this character is intensified if the closet is not provided with a fire-resistive lining.

7. See that all supply valves are open, and try water outlets to ascertain if all pipes are free and ready for service.

8. See that fire department connections drain properly and that caps are in place and well lubricated.

9. Have on hand, for emergency use, a supply of extra sprinklers; also (to facilitate repairs) extra fittings and plugs, together with a special sprinkler wrench.

10. When it becomes necessary to close a sprinkler valve during working hours, a competent man should be stationed at the valve, so that water can be turned on immediately in case a fire occurs.

11. In case of extensive changes in branch piping, have the sprinkler pipe plugged where disconnected. The pipe should not be unplugged until the branch piping is entirely re-arranged and the workmen are ready to make the final connection. By following this procedure, instead of having the water shut off at the post indicator valve while the work is going on, normal water pressures can be maintained on all but the disconnected sections of a system.



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The Eddy Fire Pail is practically ever-lasting. Made of Indurated Fibreware and made all in one piece without hoop, seam or joint it will never rust, bulge, leak or fall apart.

Note particularly the rounded bottom which assures the pail being placed in a rack or on a hook when not in use—where you want it, when you want it.

Most good hardware dealers carry the Eddy Fire Pail in stock. Ask your local man about it next time you call.

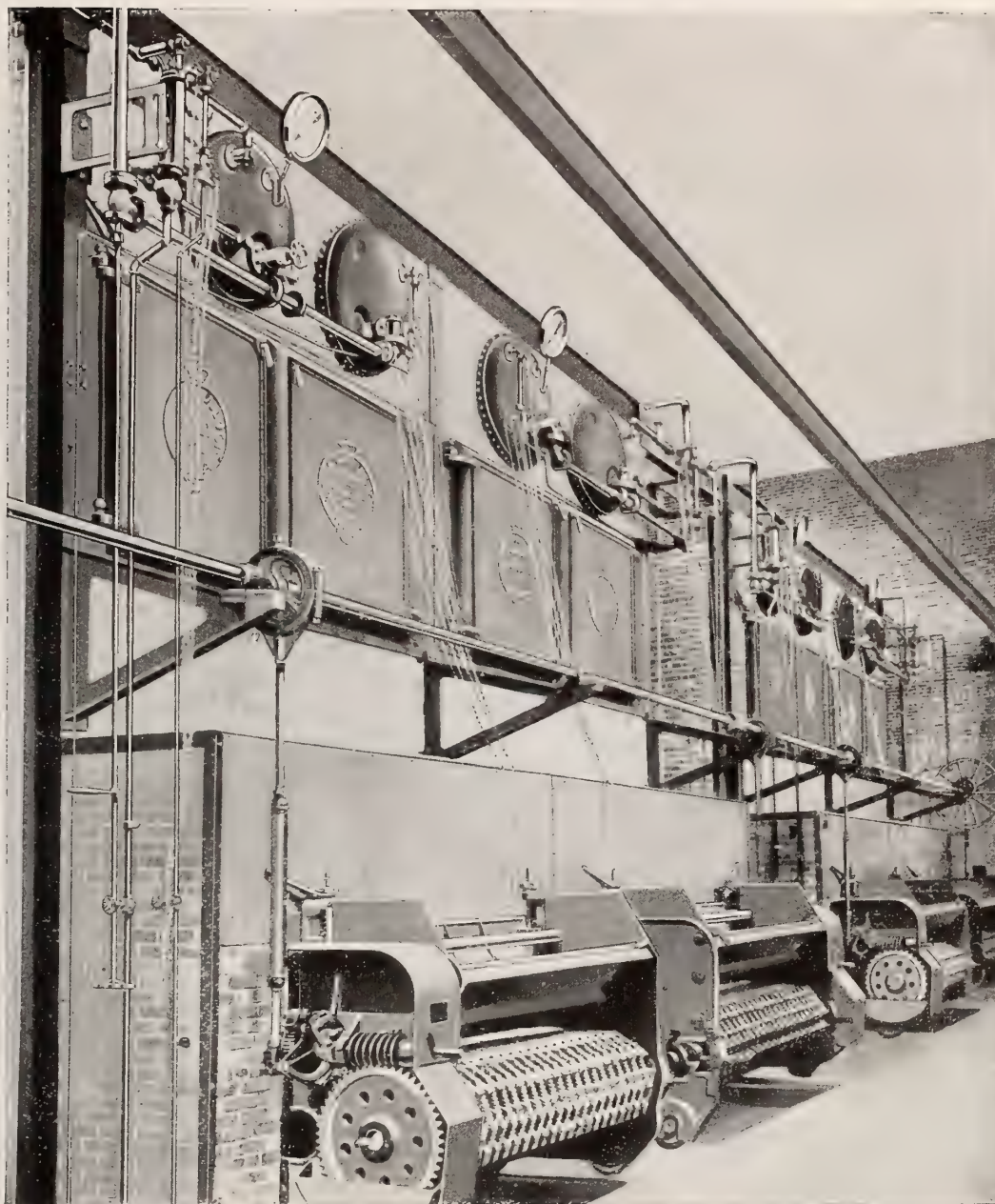
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12. When changes or repairs are made in the system the inspection department having jurisdiction should be notified before water is shut off, and care should be taken to see that the least possible portion of the equipment is out of commission at one time. The city fire department should be informed whenever a system is out of commission.

Fire Pumps

13. Ascertain by test that pumps are in condition for immediate service. Every pump should be started at least once a week, and the water discharged through relief valve or other outlet.

14. In case of steam pumps, see that steam connections and traps are in perfect order. Ample steam should be maintained at all times.

15. In the case of electric pumps all wiring and connections should be thoroughly examined and tested.

16. Give special attention to the heating of pump rooms. The temperature in these rooms must not be allowed to fall to a point at which there will be danger of freezing.

17. Examine the ends of suction pipes to see that leaves or other refuse matter have not clogged holes in strainers. The capacity of a pump may be greatly reduced by this condition. Clean suction wells and examine intake pipes to well.

18. See that there is a good supply of lubricating oil on hand.

Hydrants, Open Sprinklers and Standpipe Systems

19. Test all hydrants and post indicator valve. See that they are well oiled and that hydrants drain properly. Where hose is provided at hydrants it should be kept connected to outlets and free from water.

20. Make special examination of inside standpipes and connections, bearing the hazards of freezing particularly in mind.

21. Test the water curtain (open sprinklers) before the cold weather season begins. See that valves are tight and that all pipes are thoroughly drained.

22. Hydrants and hose houses, post indicator valves, valve pits, etc., should be kept free from ice and snow and should be accessible at all times.

Water Barrels, Pails and Hand Pump Extinguishers

23. Where water barrels, pails, or hand pump extinguishers are located in rooms subject to freezing temperatures, use calcium chloride to lower the freezing point of their contents. The following table shows approximately the temperatures at which water will freeze when calcium chloride (commercial 75 per cent.) is added in the proportions shown to depress the freezing point:

Approximate Freezing Temperature Degrees Fahrenheit.	Water	To make 2½ Gallons Anti-freezing Solution		
		Calcium Chloride	Specific Gravity	Degrees Baume.
10°.....	2 Gal. 1 qt.	5 lbs.	1.139	17.7
zero.....	2 Gals. 1 pt.	6¼ lbs.	1.175	21.6
10° below.....	2 Gallons	7 lbs. 6 oz.	1.205	24.7
20° below.....	2 Gallons	8 lbs. 6 oz.	1.228	26.9
30° below.....	2 Gallons	9 lbs. 2 oz.	1.246	28.6
40° below.....	2 Gallons	10 lbs.	1.263	30.2

The strength of the solution obtained may be tested by using a hydrometer to determine the specific gravity. This is necessary in the case of a solution which has been standing a long time, or which has been made from calcium chloride not freshly opened. About a tablespoonful of lime added to each pail will prevent acidity and consequent corrosion.

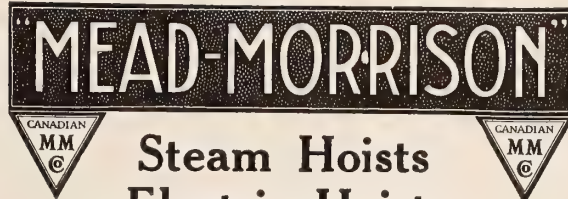
Close fitting covers on calcium chloride solution containers will help to preserve the solution as mixed. The inside of all containers to be used for calcium chloride solution should be coated with asphaltum paint.

Calcium chloride is recommended in place of common salt because the latter will always rust metals and may become objectionable because of its tendency to "creep" and crystallize all over the receptacle. In emergencies when calcium chloride is not immediately available, salt may be substituted, but no common salt solution will withstand temperatures below about 1 degree Fahr.

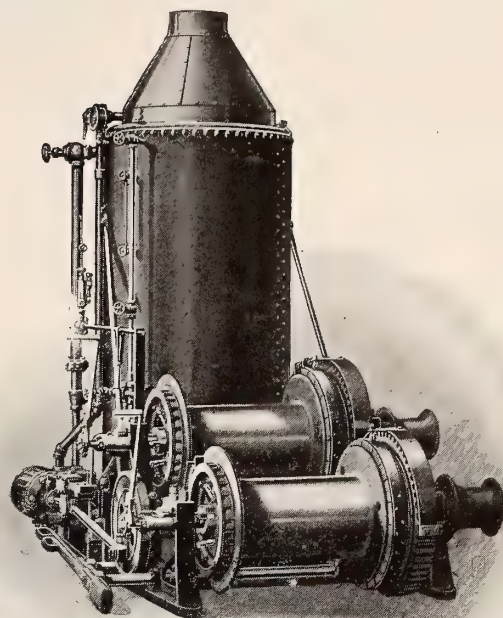
When salt is used it should be mixed in accordance with the following table:—

Temperature of Freezing degree Fahr.	Pounds of Salt per Gallon of Water	Pounds of Salt per gallon of Solution
To withstand 24 above zero.	use ½	equivalent to ½
To withstand 18 above zero	use 1	equivalent to 1
To withstand 12 above zero	use 1½	equivalent to 1½
To withstand 7 above zero	use 2	equivalent to 2
To withstand 3 above zero	use 2½	equivalent to 2½
To withstand —1 below zero	use 3	equivalent to 3

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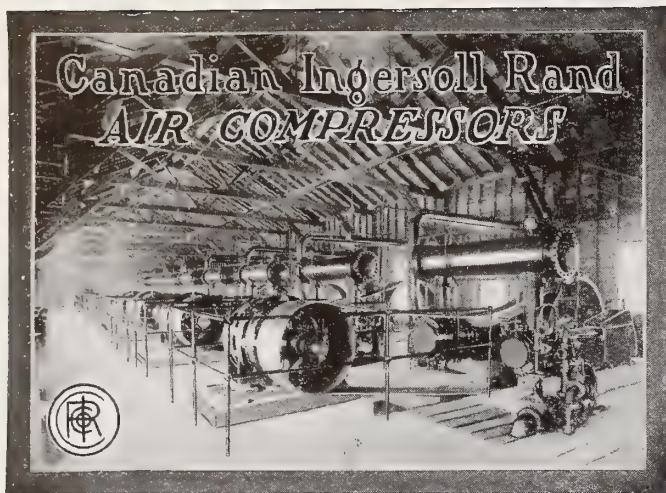
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Of greater importance than this justifiable pride of the maker, and user, however, is the investment value of Canadian Ingersoll-Rand Compressors from a "cold-blooded, dollars and cents standpoint." Men in charge of large mines, industrial plants or construction jobs, know that it is always the "last cost" which reveals the wisdom or economy of purchase—and "last cost" takes account of utility, power consumed, attendance, maintenance cost and depreciation.

It is a significant fact, therefore, that for more than a quarter of a century, Canadian Ingersoll-Rand Compressors and Compressed Air Equipment has predominated on practically every important mining, railroad or industrial project in Canada.

We carry PLB-2 Compressors with capacities ranging from 624 to 1290 cu. ft. per minute in stock for immediate shipment. Our nearest branch will gladly send bulletins or any other information that you may wish to have.

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This solution should be mixed in a vat before being placed in barrels, care being exercised to see that the salt is entirely dissolved. If dumped into barrel and covered with water, or if thrown into a barrel of water, the salt will be only partially dissolved and unsatisfactory results obtained. Barrels with wooden hoops should be used, as salt will corrode steel hoops or steel tanks.

At 3 pounds per gallon of water (2½ pounds per gallon of solution) further addition of salt is useless. Salt water solutions will begin to freeze at temperatures below—1 degree Fahr. and are not effective where lower temperatures will be encountered.

Chemical Extinguishers (Soda-Acid and Foam Types)

24. See that no extinguishers of these types are exposed to temperatures lower than 40 degrees Fahrenheit. Diluted sulphuric acid may freeze at a higher temperature than water; and at from 36 to 38 degrees Fahrenheit there is likely to be material precipitation in the soda solution. Low temperatures may also produce a noticeable retardation of action even though precipitation is not evident. The freezing point of the soda solution is practically that of pure water.

25. Absolutely prohibit the addition of "non-freezing" compounds of any character to the contents of these extinguishers. Extinguishers have frequently been rendered inoperative by this means, and fatalities are on record, due to bursting of extinguishers as a result of corrosion induced by such treatment. The addition of salt or calcium chloride to the soda solution causes the soda to precipitate, thereby defeating the essential principle of operation of these appliances.

26. Frostproof cabinets for chemical extinguishers, even when they contain some heating unit, should be provided only in consultation with the Inspection Department having jurisdiction. Expert opinion is necessary in each case as to the conditions under which such cabinets may safely be used.

General Precautions

27. Instruct the night watchman thoroughly in the use of all fire apparatus, the operation of all valves, and the proper method of giving an alarm. Employ only able-bodied and intelligent men of good character in this important position.

28. Place thermometers in the colder portions of the plant and keep close watch upon temperatures during severe weather.

29. Have all broken windows and skylights repaired and all outside doors made thoroughly weather tight. See that no attic ventilators are left open to the outer air.

30. Secure maximum efficiency from available heating equipment by having all boilers and flues cleaned before winter arrives.

31. To thaw water pipes that have become frozen, wrap frozen section with cotton cloth and pour hot water upon it until the ice in the pipe gives way. Rags on the floor at the base of or under the pipe will absorb the waste water. If the freezing is too severe to yield to this treatment send for a plumber.

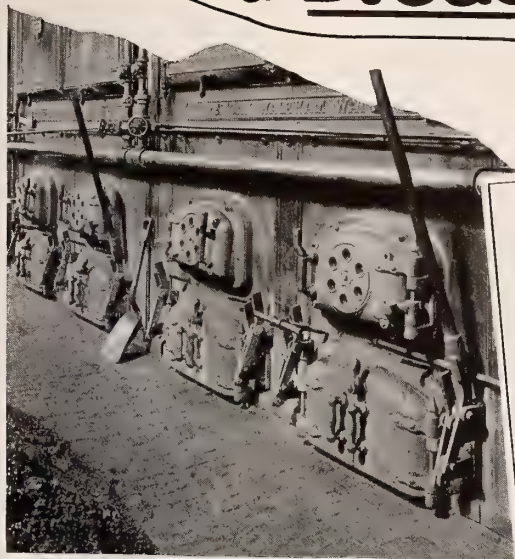
Good results have also been secured by use of electricity where proper apparatus was available.

A burning match, torch or open flame of any description should never be employed to thaw pipes. To wrap the pipes with oil-soaked rags and set them on fire is worse than folly; it is incendiarism. Pipes are almost invariably adjacent to walls or partitions where there is an ascending current of air to feed and spread a flame. Even if the flame does not start a fire its sudden local heat may cause the pipe to break and flood the premises with water.

32. Make sure that yards around buildings are kept clean and in good order. Obstructions such as lumber and miscellaneous storage, at all times undesirable, may interfere very seriously with the handling of hose streams in a fire occurring after a heavy snowfall, particularly at night.

At all times consult and co-operate to the utmost with the inspection department having jurisdiction. Also do not fail to call upon your local fire department for advice and help.

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Files Stokers increased the efficiency of one plant sufficiently high to warrant discontinuance of two of eight boilers.

Costs of installation and maintenance of Files Stokers are exceedingly low. Yet these costs become insignificant when the numerous advantages to be obtained from them—in addition to decided savings in fuel and labor—are considered and compared with the surprisingly small investment entailed.

Take, for instance, the flexibility of the stoker in responding to load fluctuations. When the need for steam is great or small, Files Stokers operate with the same supreme degree of ease and efficiency. It is a common occurrence for these stokers to economically carry heavy overloads—often as high as 200% of rating—for several months without unnecessary exertion of the boiler room force or the slightest damage to the boilers.

Read Engineer Prue's letter describing his satisfaction with Files Stokers. This is real evidence of the high capacity of the stoker and its ability to easily and rapidly work up into peak loads and high steam pressures, holding these for unusually long periods. Stoker per-

formance of this sort is a much sought for feature—it is universal with Files Stokers.

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- 2—Correct distribution and proportion of air according to load carried.
- 3—Fuel Bed continuously kept clean, uniform and "rich".

We could mention numerous installations—concerns whose importance is recognized at a glance—that will invariably express the same tone of satisfaction as the Park Spring Dyeing and Bleaching Company; that have found Files Hand Stokers their stepping stone to increased power production at decreased costs.

Given the opportunity, we will be glad to present these facts to your complete satisfaction.



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In reply to yours of the 20th regarding hand stokers, would say that we have installed one of the Files Engineering Company's stokers under one of our boilers, and same is working out very satisfactorily.

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Trusting the above is the information wanted, we beg to remain

Yours very truly,

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Book Reviews

Distribution of Wealth

Property. By Arthur Jerome Eddy. Chicago: A. C. McClurg Co.

This book is a discussion which contains a very full expansion of the efficiency system as applied to the use of capital and an explosion of theories held by Henry George and the Communists of various schools. In some places it is an undue development of the obvious, yet the analysis of system of holding private property in land and movables is so searching and complete that its too complete expansion in spots is not a defect.

The distinction between paper wealth and real wealth is very clearly made, and the fullest credit very sincerely given to the class of men who keep their wealth largely in paper form and thereby enable the wheels of the agricultural, commercial and industrial world to revolve.

The author's great quarrel with all forms of Communism, mild and violent, or State control or ownership, is with respect to the dull grey monotony of the one if equity is to be fully observed, the inefficiency and wastefulness of the other and the grave curtailment of individual initiative or incentive to improve in both.

His idea of the futility of attempts at the redistribution of wealth is exemplified by this extract:

"The story is told that one day a man rushed up to Rothschild and exclaimed angrily:

"'You have a million pounds.'"

"'Well?'"

"'You've no right to so much money.'"

"'Who should have it?'"

"'The people.'"

"'Of England or the world?'"

"'Of—of the world,'" the man faltered.

"'All right, take your share out of this and distribute the balance where it belongs,' and the banker handed the man a penny."

His definition of private rights is predicated on the fact that they are only what the law allows, that private rights have been made the subject of great changes and restrictions by legislation, and that further change and restriction still lies in the hands of public opinion crystallizing in the form of the law of the land.

It is his view that "inequalities of rank, power, privilege, are inherent in men, in church and state, in labor unions and political parties, in sports and wars, and it is this personal equation that leads to inequalities in the distribution of wealth and not *vice versa*" and he comes to the conclusion that there is no privilege, human people being what they are, that would not be accentuated in any different system.

There are some curious contradictions in the book, and despite the claims of the writer of the preface for Mr. Eddy as a great moral force there are few evidences in this volume of that characteristic, though doubtless many of his other works bring this out more clearly and throw about the writer a geniality and humanity that are absent from this purely intellectual analysis.

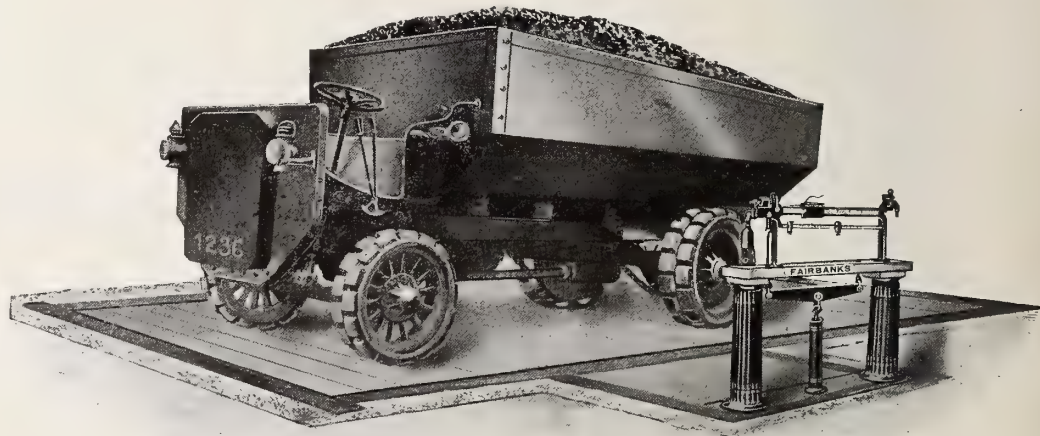
One beauty of the discussion is that most of the inferences are left absolutely open for the reader's own completion. Decidedly this is a stimulative book well worthy of serious study by those who desire to equip themselves for the analysis and discussion of fundamental economic problems.—Alex. Marshall.

Powdered Coal

The Preparation, Transportation and Combustion of Powdered Coal. By John Blizard. Ottawa Government Printing Bureau, 1921.

This book contains some of the results of the investigations in which the Division of Fuels and Fuel Testing has been engaged since the organization of the Mines Branch, Department of Mines, in 1907. These investigations have had as their object the development of Canada's fuel resources. The present work deals with the facts discovered during research work on powdered fuels and shows how lower grade coals can be advantageously employed for metallurgical and steam-raising purposes when burned in powdered form.

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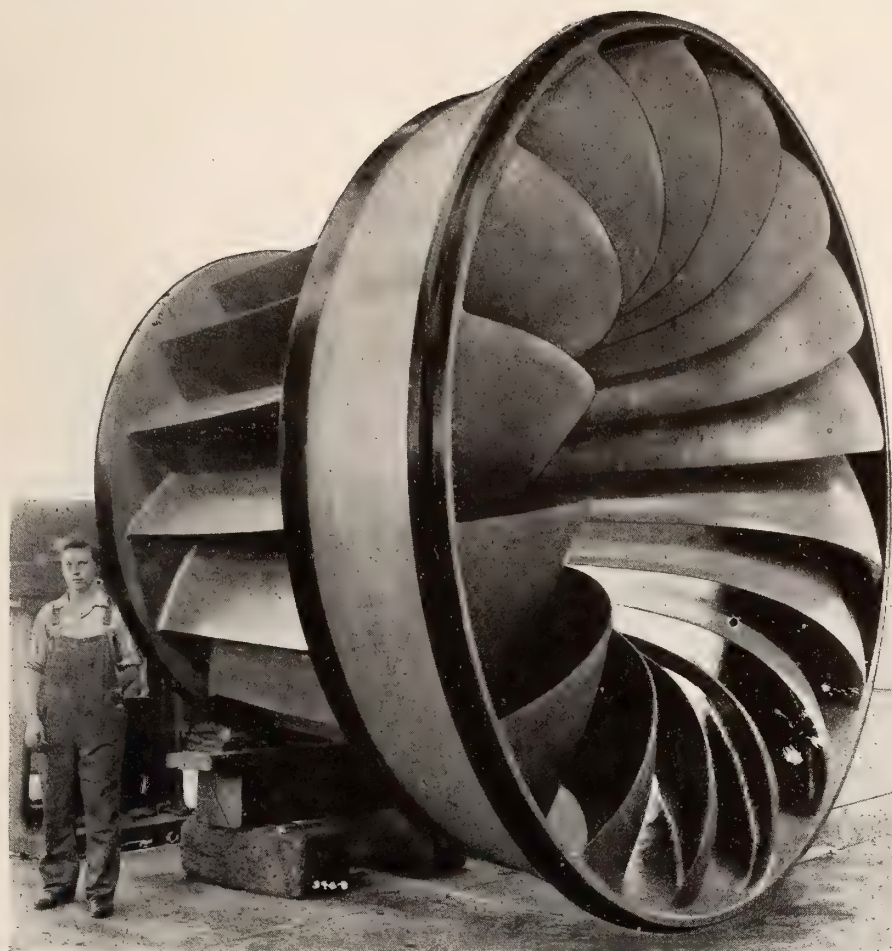
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(M-29)

An Index to Engineering Articles

The Engineering Index, 1920. New York:—The American Society of Mechanical Engineers. \$6.00.

This reference work performs for engineering and allied technical periodicals the same useful service which Poole's Index performs for literary and kindred magazines. That is to say, it largely saves from loss the mass of information contained each year in the pages of these publications. All that a reader or investigator need do to post himself on what has been written during the year on any engineering theme is to look up the subject in the Index, ascertain in what publication or publications articles appeared and then consult them in some good reference library. In this way, the Index is a great saver of time and effort and an invaluable possession for anyone who makes much use of engineering material.

The usefulness of the Index itself is enhanced by the fact that not only does it list the subject but gives a brief summary of each article dealing with it. This enables the investigator to decide whether it is worth while looking up the original article. Every possible assistance is given in the way of time-saving, for each reference supplies not only the name and date of the publication containing the article, but the page number and number of figures in the article. Numerous cross-references assist in the facilitation of the search for special information.

The 1920 volume, dealing with the publications of last year, contains 586 pages. There are nearly 14,000 items referring to articles in some 700 periodicals, a list of which is given in the preface. In selecting the items the engineering staff of the American Society of Mechanical Engineers, who have now brought out reports and publications regularly received by the Engineering Societies' Library, New York. These are printed in some ten different languages and comprise the most complete collection of scientific and engineering publications in the world. All of which gives a very fair idea of the scope and usefulness of the Index.

It may be interesting to note that the Engineering Index was

started originally in 1884, by Prof. J. B. Johnson of Washington University, St. Louis. He began to index the articles appearing in the leading current periodicals of the time for the Journal of the Association of Engineering Societies. At the end of five years the first volume was published. A second volume appeared in 1895. From then until 1918, the Index was published by the Engineering Magazine Company. In 1919 it was taken over by the American Society of Mechanical Engineers, who have now brought out two volumes. It has thus obtained an established place among books of reference.

British Mineral Industry

Barium Minerals, 1913-1919. London, 1921, His Majesty's Stationary Office.

This booklet is one of a series being issued by the Imperial Mineral Resources Bureau, under the general heading of the Mineral Industry of the British Empire and Foreign Countries. The present work takes up the war period and is a digest of statistical and technical information relating to barium minerals. Production, consumption and importation of the minerals are the chief headings under which the industry is considered and though the book contains only 26 pages a surprising amount of information has been condensed between its covers.

Phosphates, 1913—1919. London, 1921, His Majesty's Stationary Office. Price 2s. net.

This is another booklet in the series being issued by the Imperial Mining Resources Bureau which, when completed, will be a complete survey of the mineral industry of the British Empire and foreign countries during the period, 1913—1919. General information on the minerals, their production, sources of supply, prices, manufacture and experimental work is followed by statistics of production and imports in different countries. A list of references to technical literature completes the monograph.

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An Export Reference Work

Export Trade Directory. Compiled under the supervision of B. Olney Hough, Editor American Exporter, New York; American Exporter, 370 Seventh Avenue. \$10.00.

From the standpoint of the exporting manufacturer, this 1,036-page volume is invaluable. It contains a wealth of information which represents the painstaking effort of years of work. While intended primarily for the needs of United States manufacturers and while the great mass of the references are to United States firms, Canada is not entirely overlooked and there are quite a number of entries relating to this country.

The book is built around the list of export merchants which takes up practically half its bulk. This is not simply a list of names and addresses, but conveys such additional particulars as telephone numbers, cable addresses, codes, officers, principal markets covered, principal products handled, location of branch offices and agencies, etc. Each house is also rated. Supplementing this main list, which is arranged alphabetically according to the names of the companies, are classifications according to the markets cultivated and the goods shipped. This enables a manufacturer, who wishes to sell certain lines to certain markets to get in touch rapidly with export merchants specializing in these particulars. There are 2,459 houses listed, which gives some idea of the value of the book.

Other features of the volume, which contribute to its usefulness, are lists of specialized export merchants—companies exporting such commodities as coal, cotton, grain, lumber and tobacco,—lists of leading bankers engaged in foreign exchange business, lists of foreign freight forwarders and export trucking and packing companies, steamship services to foreign ports and information, alphabetically arranged, how to reach certain markets; consuls of foreign countries in the United States and United States consular and commercial representatives abroad.

The new feature of the 1921 edition is a list of 2,674 foreign connections of American merchant houses, with their buying correspondents in the United States, American buying offices of foreign concerns which buy for their own house abroad and the

list, already mentioned, of exporters of specialized lines. It is clear from a consideration of the comprehensive contents of the directory, that it is an indispensable volume on the desk of any exporter.

The Labor Movement

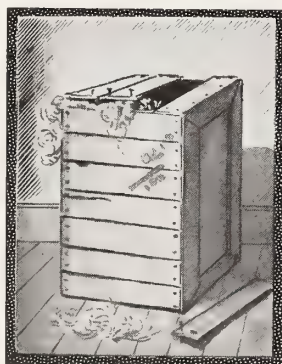
The Labor Movement; Its Conservative Functions and Social Consequences. By Frank Tannenbaum, New York, 1921, G. P. Putnam's Sons.

This book is a brilliantly written analysis of the part played in the social organization by the labour movement, by an author who is naturally disposed to be in favour of that movement owing to his own experience with it and its leaders. To one whose point of view is from the opposite angle the argument seems faulty, and yet the fallacies are so cleverly concealed that a great deal of thought is necessary to bring them to light.

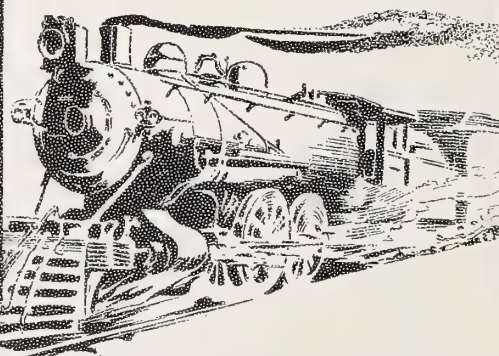
Mr. Tannenbaum's major premise is that the chief social characteristic of the present age is insecurity. He finds indications of this on every hand; loss of time when workers are laid off during slack periods, the large labour turnover in many industries, professional men advertising for work, the high percentage of tenant farmers in the United States, all point to the fact that for the majority of people life is insecure. He traces this insecurity to the machine, which he calls the centre of gravity of the present age. The development of machinery means an increase in the power of the industry and a decrease in the number of workers. And therefore the working man and woman have become nomads, never certain that their employment will continue, and moving from place to place as industrial activity increase and diminishes.

In this prevailing insecurity Mr. Tannenbaum looks for a remedy and finds it in the labour union. "The labour union," he says, "developed primarily as an instrument for self defence. It is an attempt to harness the machine around which the workers' destinies are spun, and along with that it is an effort to stem the tide of insecurity by which the individual worker's life is menaced." In all activities of the unions the author finds this striving for security

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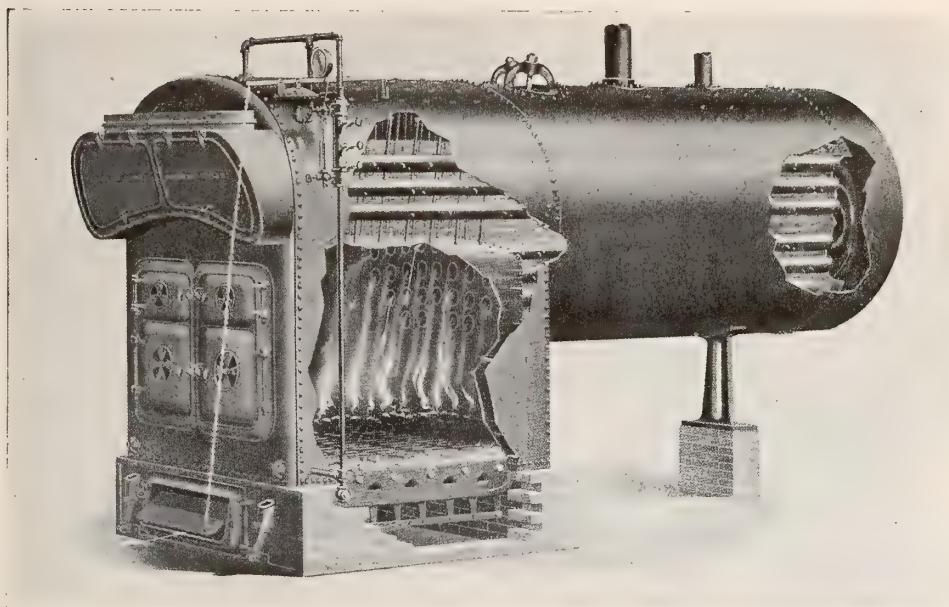
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and economic stability to be the underlying motive. On the other hand the motive of employers seems to him to be profit, and the competitive spirit requires freedom to manipulate industry as it sees fit. These motives, acting as they do at present, are bound to conflict. The two alternatives seen by the author are first, the destruction of the labour movement or, second, the absorption by the labour movement of the control and power now in the hands of the business community and the substitution of co-operation for competition. Mr. Tannenbaum is fairly confident that industrial democracy will displace the present capitalist system.

About one-third of the book is devoted to the methods by which the unions are furthering their cause. Mutual participation, co-operation, suggestion and criticism and subordination to the purposes in hand are the terms by which Mr. Tannenbaum summarizes these methods. These unite the workers. "It is not the strike or the boycott, not sabotage or ca'-canny which is the basic method of the labour movement; it is the spiritual and intellectual unity of purpose and function which is the vital contribution to human co-operation that is being forged by the labour movement."

It is unfortunate for the author's argument that strikes and sabotage have been the obvious features of the labour movement during recent years. It needs an optimistic eye to discover anything very spiritual or intellectual in the activities of many unions as seen by the general public. In their private enterprises, such as sick benefits, old age pensions, homes, etc., much that is admirable is to be found; but, as viewed by the outsider, the unions too often seem to be actuated by motives as selfish as those they ascribe to their employees.

It cannot be doubted that the labour movement is altering the state of society and that the alteration will continue for many years. If, as Mr. Tannenbaum thinks, the function of the unions is to form an element of stability in a dynamic world, and if they will work out problems reasonably, recognizing that the other side has rights and, where rights conflict, showing a readiness to compromise on some practical basis, the labour movement can gain the respect of everybody. Industrial democracy gained by such a programme

might prove to be a satisfactory state of society. If, however, industrial democracy means the rule of a class, and that is the goal to which the more radical of the labour movement seem to be striving, there seems to be little hope of improvement. Society changes, but "*plus ça change, plus c'est la même chose.*"

An Interesting Souvenir

As a souvenir of the eightieth anniversary of their establishment in Auckland, New Zealand, the firm of L. D. Nathan, & Co., Ltd., issued an illustrated booklet, containing admirably reproduced photographs of scenes in and around Auckland, together with a series of group pictures of their staff and a number of views of their buildings. A copy of this fine booklet has recently been received by INDUSTRIAL CANADA.

L. D. Nathan & Co., Ltd., are the oldest established house in New Zealand, dating back to 1840. They act as agent for a long list of British manufacturing companies and shipping lines and do a considerable insurance business as well. Starting in a small way, it is a rare thing to-day for a vessel to reach Auckland without a long list of goods carrying the L. D. N. mark, whether from England, Canada, United States, India, Ceylon, Singapore or Japan.

Employees' Club House

Brown Corporation Complete Attractive Social Centre at La Tuque, Quebec

The Brown Corporation, who conduct extensive operations in pulpwood, sulphate pulp and lumber at La Tuque, Quebec, have just completed a new clubhouse for the use of their employees. The following description from the *Pulp and Paper Magazine* gives some idea of the advantages which will be enjoyed when the building is opened.

"The plan of the building is in the form of a broad T, of which the top stroke is 101 feet in breadth. A basement extends under the entire building and contains a swimming pool 20 x 60, bowling alleys, locker room, showers, lavatories, boiler room, etc. The



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"The front part of the building has three floors above the basement. On the first floor in the centre there is a spacious entrance hall with arches at each end leading to the billiard room and reading room, respectively. Behind these rooms on one side there is the ladies' room and on the other the boys' department. One of the features of the club house is that the boys' department can be isolated from the rest of the club, both on this first floor and in the basement where are the boys' locker room and showers, etc.

"On the second floor there is a banquet room and three club rooms, which can be opened to form a large dancing hall when desired.

"On the third floor is an apartment for the janitor and his family and seven bedrooms which will be occupied by visitors and perhaps some of the lucky bachelors employed by the Company. Kitchen accommodation has been provided to supply the needs of the ladies' afternoon tea parties on the first floor and the banquet room on the second floor.

"The exterior of the building is in red brick with white trimmings and conforms to the style of the well known Colonial house. The interior woodwork is Canadian Ash, stained and waxed to a medium brown."

Standardization in Belgium

A COMMUNICATION has been received by the Canadian Engineering Standards Association from the Association Belge de Standardisation (A.B.S.) advising that the following publications have been issued by that body:—

- No. 1—Rules for Construction of Steel Roof Trusses.
- No. 2—Rules for the Construction of Steel Tanks.

No. 3—Rules for the Construction of Galvanized Corrugated Roofs and Partitions.

No. 4—Standardization of Shafts and Pulleys.

No. 5—Standardization of Steel Bridges.

No. 6—Standardization of Bolts and Rivets.

No. 7—Standard Requirements for Electrical Machinery.

The pamphlets Nos. 1, 2, 3 and 5 give directions as to the constant use and methods to be followed in the working out of the necessary calculation; they prescribe proper working methods and contain also provisions as to the delivery and erection of the structures. Conditions relating to terms of guarantee, payment, etc., are also included. The quality of material will be dealt with in a further publication.

Pamphlet No. 4, Standardization of Shafts and Pulleys, deals with the diameters of shafts and the principal dimensions of pulleys, standard sizes being prescribed with a view of lessening the number of types to be regularly furnished by Belgian manufacturers.

Pamphlet No. 6, Standardization of Bolts and Rivets, gives tables of dimensions of bolts from 6½ to 77 mm. and rivets from 6½ to 25½ mm.

The A.B.S. has also published a sheet or poster on Advice to Firemen, which is intended for use in the boiler room and gives brief instructions as to methods of firing, preparation of coal, thickness of fire, methods of cleaning fires, and other instructions leading to economy in fuel. Directions regarding precautions as to safety are also included, together with information as to proper methods of boiler cleaning and the working of super-heaters.

Pamphlet No. 7, Standard Requirements for the Inspection of Electrical Machinery and Transfers. This has been drawn up by the A.B.S. and includes two parts, the first containing definitions and particulars required in preparing enquiries or tendering for electrical machinery, and the second part dealing with the conditions to be satisfied by such machinery as regards permissible temperature rise, dielectric strength of insulation, mechanical tests, efficiency, and losses.

These publications can be obtained from the Secretary, Association Belge de Standardisation, 33 Rue Ducale, Brussels.

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The Pulse of Business in Canada

Trade Returns

Figures for October, 1921, Show a Decline in both Imports and Exports.

The summary of Canadian trade issued by the Department of Customs for October, 1921, shows a decline in both imports and exports from the 1920 figures. Exports of foodstuffs have fallen off considerably and also exports of wood, wood products, paper and manufactures thereof. The imports of iron and steel, fibres, textiles and textile products, and non-metallic minerals and products are responsible for the greater part of the decline in import trade. Following are the figures:—

	IMPORTS ENTERED FOR HOME CONSUMPTION Month of October			
	1920		1921	
	Free	Dutiable	Free	Dutiable
Agricultural and vegetable products, mainly foods.....	\$ 1,878,010	\$ 7,452,321	\$ 2,089,600	\$ 6,093,198
Agricultural and vegetable products, other than foods.....	2,885,168	3,226,809	1,898,958	1,860,968
Animals and animal products.....	1,957,191	3,088,357	1,311,776	2,421,973
Fibres, textiles and textile products.....	4,383,150	13,805,814	3,407,352	7,788,007
Chemicals and chemical products.....	1,601,198	2,026,838	746,210	1,362,401
Iron and steel, and manufactures thereof.....	3,9817.64	18,779,418	1,538,552	7,257,338
Ores, metals and metal manufactures, other than iron and steel.....	1,289,255	4,025,932	504,106	1,096,122
Non-metallic minerals and products.....	8,773,681	14,137,017	6,585,571	5,403,171
Wood, wood products, paper and manufactures.....	2,454,444	3,346,444	1,067,249	2,078,692
Miscellaneous.....	3,193,715	3,438,511	1,901,688	2,295,316
Total.....	\$32,397,576	\$73,372,461	\$21,051,062	\$38,467,186
Duty collected.....		\$14,872,440		\$9,270,498

	EXPORTS Month of October		1921	
	Domestic	Foreign	Domestic	Foreign
Agricultural and vegetable products, mainly foods.....	\$57,468,358	77,577	\$40,123,460	47,095
Agricultural and vegetable products, other than foods.....	2,622,326	38,535	879,417	73,399
Animals and animal products.....	18,267,759	393,261	14,001,692	330,450
Fibres, textiles and textile products.....	684,525	290,507	355,142	64,370
Chemicals and chemical products.....	1,897,007	35,619	836,976	14,624
Iron and steel and, manufactures thereof.....	6,732,494	610,718	1,977,032	299,890
Ores, metals and metal manufactures, other than iron and steel.....	4,592,018	58,628	2,240,084	60,588
Non-metallic minerals and products.....	3,707,544	104,239	2,159,623	98,924
Wood, wood products, paper and manufactures.....	29,874,174	36,436	16,385,749	41,965
Miscellaneous.....	3,502,015	253,260	982,507	283,166
Total.....	\$129,348,220	\$ 1,798,780	\$79,941,682	\$1,314,471

Steel Ingots and Castings

New High Record for the Year Established by October Production

The output of steel ingots and castings for the month of October established a new high record for the year at 72,204 long tons, an increase of nearly 16,000 long tons, over the production during the preceding month, and some 200 tons more than the output for August, when the previous high record for the year was made. During the latter part of the month, particularly, there was a favorable turn in the steel making industry closely following the increased production in the United States at the same time. As noted in the preceding record the output of pig-iron recovered to the August level and in the production of steel ingots and castings the output also rose to the August mark and passed slightly beyond.

Basic open hearth steel ingots made by the several firms for their own use rose to 69,809 tons from a total of 54,320 tons in September. No acid open hearth steel was made and very little bessemer.

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Electric steel ingots increased to 542 long tons or nearly three times as much as in the preceding month. From this data it will be seen that the total production by makers for their own use during October was 70,352 long tons as compared with 54,478 tons in the preceding month.

There was a small production of steel ingots made for sale. Basic open hearth steel castings made for further use amounted to 228 tons or an increase of about 50 per cent. and basic open hearth steel castings made for sale rose 100 tons to 792 tons making a total for this class of 1020 long tons. Fourteen tons of bessemer castings was made for further use and a total of 113 tons was produced for sale making a total output of 127 long tons.

Electric steel castings declined slightly to 702 long tons, consisting of 6 tons made for further use and 696 tons produced for sale.

Direct steel castings for October thus mounted to 1849 long tons, of which 1601 tons were made for sale, the balance being used by the producers in further processes. The average monthly output of steel ingots and castings for the year is now 55,000 long tons in comparison with which figure the output of 72,000 tons for the current month stands out in good relief.

Pig Iron and Ferro Alloys

October Output Reflects Upward Trend Seen in Many Lines

The upward trend noticeable in so many lines towards the latter part of October was reflected in the output of pig iron for the month, the total being almost 6,000 tons higher than the amount reported from the Mining Branch of the Dominion Bureau of Statistics as the output for the preceding month. Basic pig iron made in blast furnaces and produced for the use of the makers amounted to 41,846 tons in October as compared with 38,590 tons in September. Basic iron made for sale rose one hundred tons to 510 tons making a total output for the month of 42,356 long tons. A total of 87 tons of foundry iron was made for further use while 7,130 tons was produced for sale. This latter figure is 50 per cent.

higher than the corresponding figure for the previous month. No malleable iron or direct iron castings were made in October so that the pig iron produced by makers for their own use amounted to 41,933 long tons; that for sale was 7,640 long tons, which makes a total output for the month of 49,573 tons. The average monthly output of pig iron this year to date remains unchanged at 51,000 long tons.

Ferro-alloys showed a similar healthy increase, the output for the month being 1,266 long tons as compared with 914 tons in September. This product was as usual, all ferro-silicon in grades of 15 per cent., 50 per cent. and 75 per cent. The output of ferro-silicon in October was higher than for any month since February last when a total output of ferro-alloys since it is the custom to include under this heading any spiegeleisen that is produced as the ferro-silicon. No spiegeleisen has been made since August.


There was no change during the month in the number of furnaces operated, the five in blast at the beginning of the month continuing active throughout and being still in operation at the close of the month. These five included two at Sault Ste Marie, one at Hamilton and two at Sydney.

The gradual improvement in the steel situation noted in the September report is reflected in the October output, which, it may be expected, will be well maintained.

Wholesale Prices

Canadian Bank of Commerce Index Number Shows Decline during October

The index number of wholesale prices of exports, published by the Canadian Bank of Commerce in their monthly commercial letter, has fallen from 159.26 in September to 150.06 in October while that of imports shows a slight rise of from 147.92 to 148.81 during the same period. The combined number shows a decline from 153.59 to 149.48. Among exports, wheat, flour, potatoes, cattle and



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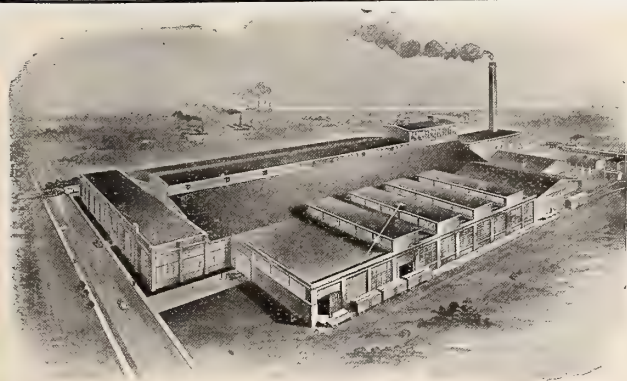
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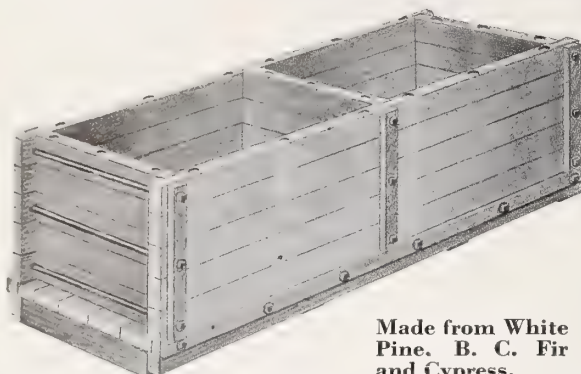
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hogs have experienced the most severe declines; wheat is at present on the price level of 1915. The prices of several other farm products have fallen slightly but butter remains steady. Fish, apples and silver have risen in price. On the side of imports, corn, sugar and pork continue to fall in price, and this is also true in a lesser degree of pig iron and steel. Manufacture of cottons have risen considerably, and rubber, coal and coke slightly.

Building Permits

October Figures Slightly Higher in the East and Lower in the West

Building permits issued during October show little change as compared with the same month last year. An increase of \$616,618 in Eastern cities and a decrease of \$634,403 in the West leaves the total only \$17,785 below the figures for October, 1920. The total for the year to the end of October is \$79,144,674, as compared with \$98,150,299 for the first ten months of 1920. Following are the figures for October with comparisons:

	Eastern Cities	Oct., 1920	Change
Maritimes—	Oct. 1921		
Halifax.....	\$ 164,264	\$ 339,596	— \$ 175,332
Moncton.....	42,100	176,648	— 135,548
St. John.....	143,800	59,350	+ 84,450
Sydney.....	25,665	161,040	— 135,375
Quebec—			
Montreal.....	1,982,835	725,526	+ 1,217,309
Quebec.....	374,109	112,335	+ 261,774
Westmount.....	188,650	44,265	+ 144,385
Ontario—			
Brantford.....	27,410	68,775	— 41,385
Fort William.....	620,625	505,400	+ 115,225
Galt.....	99,090	4,500	+ 94,590
Hamilton.....	363,675	325,400	+ 38,275
Kingston.....	38,188	18,920	+ 19,268
Kitchener.....	81,400	187,490	— 106,090
London.....	232,125	267,305	— 35,180
Ottawa.....	496,465	710,649	— 214,184
Peterborough.....	28,784	211,966	— 183,182
Port Arthur.....	9,284	10,910	— 1,626
Sarnia.....	54,700	68,205	— 13,505
St. Catharines.....	24,190	40,925	— 16,735
St. Thomas.....	22,985	13,755	+ 9,230
Stratford.....	8,560	35,093	— 26,533
Toronto.....	2,063,837	2,884,372	— 820,535
Welland.....	17,950	12,565	+ 5,385
Windsor.....	240,835	424,025	— 183,190
Woodstock.....	13,077	29,305	— 16,228
York Township.....	1,004,900	301,850	+ 703,050
Chatham.....	11,900	24,615	— 12,715
Total 27 East cities.....	\$8,381,403	\$7,764,785	+ \$ 616,618
Alberta —	Western Cities		
Calgary.....	\$ 139,400	\$ 418,000	— \$ 278,600
Edmonton.....	129,450	72,680	+ 56,770
Lethbridge.....	5,995	5,290	+ 705
Medicine Hat.....	5,315	2,850	+ 2,465
Manitoba—			
Brandon.....	15,000	275,979	— 260,979
St. Boniface.....	9,820	12,425	— 2,605
Winnipeg.....	228,300	329,250	— 100,950
Saskatchewan—			
Moose Jaw.....	20,215	99,100	— 78,885
Prince Albert.....	12,860	4,450	+ 8,410
Regina.....	68,050	148,250	— 80,200
Saskatoon.....	105,675	53,795	+ 51,880
Weyburn.....	350	200	+ 150
Yorkton.....	26,350	54,675	— 28,325
British Columbia—			
Kamloops.....	4,400	—	+ 4,400
New Westminster.....	37,105	15,400	+ 21,705
Vancouver.....	248,065	258,833	— 10,768
Victoria.....	59,055	36,370	+ 22,685
Prince Rupert.....	54,949	17,200	+ 37,739
Total 18 Western Cities.....	\$1,170,344	\$1,804,747	— \$ 634,403
Grand Total 45 Cities.....	\$9,551,747	\$9,569,532	— \$ 17,785

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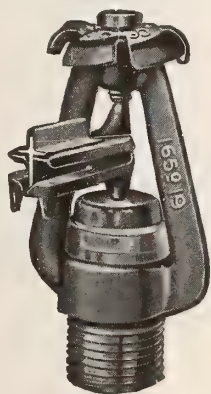
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September Prices

Slight Increase in Retail Prices and Slight Decline in Wholesale Index Number

Prices in September, both wholesale and retail, showed little change according to the summary published by the Department of Labour in the *Labour Gazette*. In retail prices, the average cost of 29 staple foods in 60 cities was \$11.82 as compared with \$11.44 in August and \$15.95 in September, 1920.

The Departmental index number for wholesale prices was slightly down, standing at 232.7 for September as compared with 236.4 for August and 326.6 for September, 1920. The decrease for the month was chiefly in livestock and meats, but there were slight decreases in grains and fodder.

Business Failures

October Shows Large Increase as Compared With 1920 Figures

Business failures during October show a serious increase over the corresponding period of 1920. The total for the four weeks as reported by Bradstreet's is 225 as against 63 last year, an increase of almost 250 per cent. Fortunately the failures were mainly for comparatively small amounts. Following are the figures for the four weeks as published by Bradstreet's:—

Week Ending	1921	1920
October 6	63	11
October 12	51	12
October 20	57	16
October 27	54	24
Total	225	63

The Employment Situation

Index Number of Employment Service of Canada Remains Practically Stationary.

Employment as reported by some 5,400 firms to the Employment Service of Canada for the fortnight ended October 8, remained practically stationary, the index number standing at 89.9 as compared with 90.2 for the preceding fortnight and 107.5 for the cor-

responding period of last year. The contraction which began early in October, 1920, continued uninterruptedly until the end of year. Although only a nominal decline is indicated in the present report the trend of the curve is in the same direction as a year ago. The seasonal expansion in logging continued during the fortnight under review and would have forced the curve upward but for the shrinkage in saw milling operations which accompanied it.

Fifteen groups added 4,330 persons to their working forces; fifteen other groups released 4,925 persons. The groups which showed expansion are:—logging, textiles, water transportation, rubber, edible animal products, leather goods, coal mining, iron and steel products, local transportation, mineral products, metallic mining, non-metallic mining other than coal, professional services, fur goods and telegraph operation. In the seven groups last named the expansion was of minor importance. The following groups showed contractions:—lumber and its products, edible plant products, building construction, hotels and restaurants, clay, glass and stone products, telephone operation, railway transportation, retail trade, railway construction, pulp and paper products, non-ferrous metal products, electrical apparatus, wholesale trade, wood distillates and laundries.

Bonds Are Offered

Pedlar People, Limited, Raising Loan to Finance Their Increasing Business

The unsold balance of \$500,000 first mortgage bonds of the Pedlar People, Limited, is being offered by Graham, Sanson & Co., Limited, Toronto and Hamilton, at 100 and interest, to yield 8%. The bonds are dated January 1st, 1921, and are due on January 1st, 1923 to 1941, with interest payable January 1st and July 1st.

The bonds constitute a first, fixed and specific charge on the land, buildings, machinery and fixtures of the company and a first floating charge on the company's undertakings, present and future. The loan is made to the company to assist them in financing their increasing business, involving the recent consolidation and improving of facilities in their plant at Oshawa.



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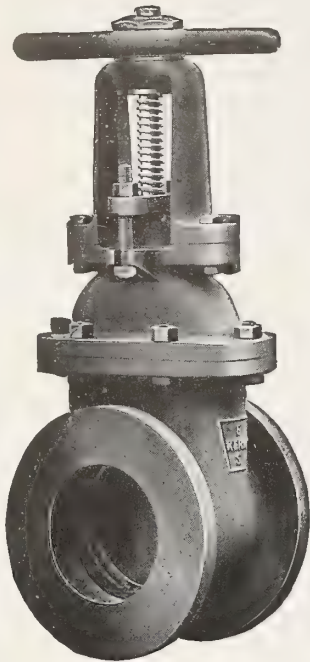
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METAGAMA (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Dec. 9
EMPRESS FRANCE (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Dec. 13
*CANADIAN EXPLORER	C. G. M. M. Ltd.	Ab't Dec. 14
MELITA (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Dec. 22
*CANADIAN LEADER (C Stge)	C. G. M. M. Ltd.	Ab't Dec. 28
MINNEDOSA (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Jan. 3
HASTINGS COUNTY	I. C. Transports Ltd.	Ab't Jan. 8
METAGAMA (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Jan. 13
BATSFORD (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Jan. 22

To London

*CANADIAN RAIDER	C. G. M. M. Ltd.	Ab't Dec. 7
BATSFORD (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Dec. 14
COMINO	Furness Line	Ab't Dec. 15
EVANGER	I. C. Transports Ltd.	Ab't Dec. 19
BOLINGBROKE (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Dec. 20
*CANADIAN TRAPPER	C. G. M. M. Ltd.	Ab't Dec. 21
BOSWORTH (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Dec. 30
GREY COUNTY	I. C. Transports Ltd.	Ab't Dec. 31
WISLEY	I. C. Transports Ltd.	Ab't Jan. 3
*CANADIAN RANCHER	C. G. M. M. Ltd.	Ab't Jan. 4
DUNBRIDGE (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Jan. 12

To Glasgow

STUNISIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Dec. 3
*CANADIAN AVIATOR	C. G. M. M. Ltd.	Ab't Dec. 17
LAKONIA (Sirocco Fans)	Cunard Line	Ab't Dec. 24
PRETORIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Dec. 28
BOTHWELL (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Dec. 30
*CANADIAN OTTER	C. G. M. M. Ltd.	Ab't Jan. 7
TUNISIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Jan. 28

§Via Halifax.

To Avonmouth

LAKONIA (Sirocco Fans)	Cunard Line	Ab't Dec. 24
BOTHWELL (Sirocco Fans)	Can. Pac. S.S. Ltd.	Ab't Dec. 30

To Australian and New Zealand Ports

WANGARATTA	New Zealand S.S. Ltd.	Ab't Dec. 20
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To Belfast and Dublin

†FANAD HEAD	Head Line	Ab't Dec. 15
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To Cardiff and Swansea

*CANADIAN NAVIGATOR	C. G. M. M. Ltd.	Ab't Dec. 13
*CANADIAN SQUATTER	C. G. M. M. Ltd.	Ab't Jan. 3

To Manchester

MANCHESTER PORT	Manchester Line	Ab't Dec. 10
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To Southampton and Antwerp

SCANDINAVIAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Dec. 24
CORSICAN (Cold Stge)	Can. Pac. S.S. Ltd.	Ab't Jan. 31

To Havre

HOERDA	I. C. Transports Ltd.	Ab't Dec. 29
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To Rotterdam and Hamburg

BALLYGALLY HEAD	Head Line	Ab't Dec. 28
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To Rio de Janeiro, Santos (Brazil), Montevideo and Buenos Aires

HYDASPES	Houston Line	Ab't Dec. 30
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To St. John's (Newfoundland)

MAPLEDOWN	Canada Steamship Line	Ab't Dec. 16
MAPLEDOWN	Canada Steamship Line	Ab't Jan. 3

*Sail from St. John.

FROM HALIFAX

To Glasgow

SATURNIA (Sirocco Fans)	Anc. Don. Line	Ab't Dec. 12
CASSANDRA (Sirocco Fans)	Anc. Don. Line	Ab't Dec. 30

To Australian and New Zealand Ports

CANADIAN SPINNER	C. G. M. M. Ltd.	Ab't Dec. 28
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To Barbados, Trinidad and Demerara

CANADIAN LOGGER	C. G. M. M. Ltd.	Ab't Dec. 14
CANADIAN HARVESTER	C. G. M. M. Ltd.	Ab't Dec. 28

To Nassau (Bahamas), Kingston (Jamaica) and Belize (British Honduras)

CANADIAN FORESTER	C. G. M. M. Ltd.	Ab't Dec. 23
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To Rio de Janeiro, Santos (Brazil), Montevideo and Buenos Aires

CANADIAN VOLUNTEER	C. G. M. M. Ltd.	Ab't Dec. 7
CANADIAN SEIGNEUR	C. G. M. M. Ltd.	Ab't Jan. 14

To St. John's, (Newfoundland)

CANADIAN SEALER	C. G. M. M. Ltd.	Ab't Dec. 8
CANADIAN SEALER	C. G. M. M. Ltd.	Ab't Dec. 22
CANADIAN SEALER	C. G. M. M. Ltd.	Ab't Jan. 5
ROSALIND	Red Cross Line	Ab't Dec. 13
SABLE I	Farquhar Co., Ltd.	Ab't Dec. 17



Winter Sports In Quebec

Historically, Quebec is the same, Winter or Summer

There are the formidable walls with their reminders of bygone days. There are the same frowning cannons, that two hundred years ago belched forth fire and destruction. There are the same picturesque streets and quaint houses, with their pointed gables, steep roofs, and off-looking windows. There are the same monuments, the same historical tablets with their reminiscent inscriptions, and there is always present the undeniable impression that nowhere on the whole Continent of North America is there a City that so calls up a picture of mediaeval Europe as Old Quebec.

Quebec from Christmas to early March offers a delightful winter holiday, with a lively program of winter sports - tobogganing, Swiss bob-sleighbing, snowshoeing, ski-ing, curling and skating.

The Chateau Frontenac, the magnificent Canadian Pacific Hotel, on Dufferin Terrace, is the cheery hospitable centre of a gay social life.

Good orchestra and dancing.

For information, reservations, etc., apply to any Canadian Pacific Agent, or to
W. B. HOWARD, District Passenger Agent,

Canadian Pacific Railway,

1 KING STREET EAST,

TORONTO ONTARIO.

THE
**New Zealand Shipping
 Company Limited**
 CANADA
 TO
Australia and New Zealand

Regular monthly sailings from Montreal in summer and St. John in winter, calling at Auckland, Wellington, Lyttelton and Dunedin (New Zealand) and Melbourne and Sydney (Australia). Sailings 20th of each month.

Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to
The New Zealand Shipping Co.
 LIMITED
 213 Board of Trade Building, Montreal

To Liverpool

*DIGBYFurness Line Ab't Dec. 15
 *Via St. John's, Newfoundland.

To Santiago, Cuba, Kingston, Montegon Bay, St. Ann's Bay, Jamaica

NEVISPickford & Black, Ltd. ... Ab't Dec. 19

**FROM ST. JOHN, N.B. and HALIFAX, N.S.
 To Bermuda and British West Indies**

	From	From
	St. John, N.B.	Halifax, N.S.
CARAQUET	R.M.S.P.Co.....	Ab't Nov. 27.....
CHAUDIERE	R.M.S.P.Co.....	Ab't Dec. 11.....

FROM NORTH SYDNEY, N.S. To St. John's, Newfoundland
 SABLE IFarquhar Company Ltd. .. Ab't Dec. 10

FROM VANCOUVER

To Kobe, Yokohama and Shanghai

C.G.M.M. Ltd.—Blue Funnel Line Joint Service
 †CANADIAN HIGHLANDER...Can. Govt. Mer. Mar. Ltd. Ab't Dec. 27
 †Will call at Yokohama and Shanghai.

To Kobe, Yokohama, Hong-Kong and Manila

C. G. M. M. Ltd.—Blue Funnel Line Joint Service
 IXXIONBlue Funnel Line Ab't Dec. 24

To Kobe, Yokohama, Shanghai, Hong-Kong, Manila and Singapore

HAROLD DOLLARCanadian Robert Dollar Co Ab't Jan. 20

To Kobe, Kokohama, Shanghai, Hong-Kong, Manila, Moji and Nagasaki

*EMPRESS OF ASIA	Can. Pac. S.S. Ltd.	Ab't Dec. 8
*\$CITY OF SPOKANE	Admiral Line	Ab't Dec. 10
*MANILA MARU	Osaka Shosen Kaisha Line	Ab't Dec. 16
*FUSHIMA MARU	Nippon Yusen Kaisha Line	Ab't Dec. 18
*†EMPRESS OF JAPAN	Can. Pac. S.S. Ltd.	Ab't Dec. 21
*\$†TOKIWA MARU	Nippon Yusen Kaisha Line	Ab't Dec. 27
*AFRICAN MARU	Osaka Shosen Kaisha Line	Ab't Jan. 1
*EMPRESS OF RUSSIA	Can. Pac. S.S. Ltd.	Ab't Jan. 5

To Australian and New Zealand Ports

†MAKURA	Canadian Australasian Line	Ab't Dec. 9
CANADIAN SKIRMISHER	Can. Govt. Mer. Mar. Ltd.	Ab't Dec. 30
†NIAGARA	Canadian Australasian Line	Ab't Jan. 13

To Calcutta and Bombay (India)

CANADIAN INVENTORCan. Govt. Mer. Mar. Ltd. Ab't Jan. 4

‡Will also call at Honolulu and Suva.

*Does not call at Moji.

†Does not call at Manila.

\$Does not call at Nagasaki.

†Does not call at Shanghai or Hong-Kong.

Third Steamer Wanted

**Satisfactory Growth of Coastwise Shipping Business
 from Victoria, B.C.**

Offerings of freight in the trade between Victoria and other British Columbia ports and California have shown a big increase during the past few months, with the result that the Kingsley Navigation Company are looking about for a third steamer to place on the route. At the present time this enterprising Canadian coastwise line are maintaining a regular schedule with two vessels, the *E. D. Kingsley*, which has been running into Victoria for years, and the *Chilkoot*, recently chartered from the Union Steamship Company of Vancouver. A third vessel, the steam schooner *San Antonio*, was acquired from the Pan-American Line of San Francisco for one voyage when cargo shipments were exceptionally heavy, and is now on her return trip south. She is not expected to come north again. The trade is so promising that a third British coastal steamer is being acquired to handle the traffic.

King Brothers, Victoria agents for the Kingsley Navigation Company, report a very satisfactory growth of business to this port. The vessels are now arriving about every eight or ten days, calling first at canneries and salteries on the West Coast with shipments of salt, then coming into Victoria to discharge local cargo. The balance of the freight goes to Vancouver, much of it for overland shipment to prairie and Eastern points.

MORRIS HOISTS

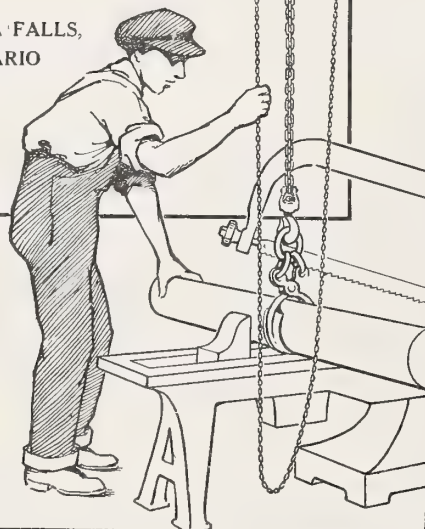
**LIFT FAST,
 HOLD FAST.**

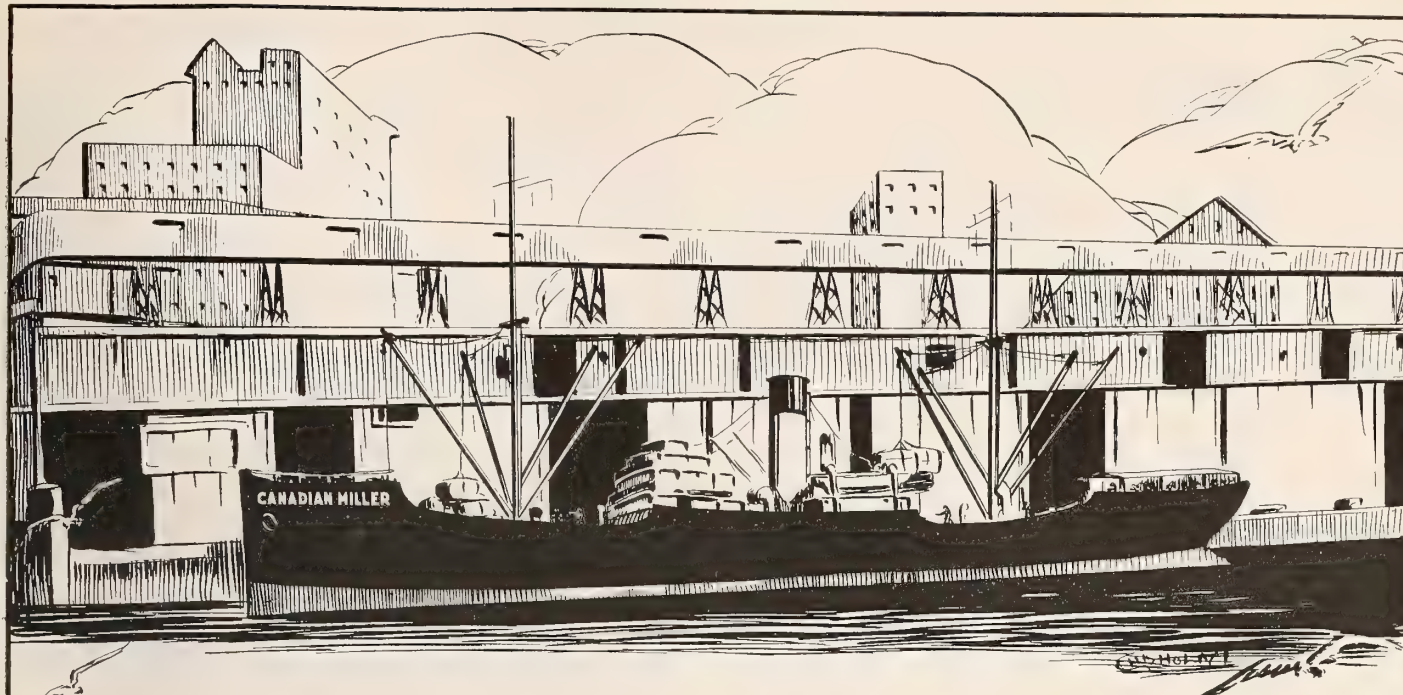
SEND A TRIAL ORDER TO YOUR
 REGULAR DEALER, OR TO

**THE HERBERT MORRIS
 CRANE & HOIST COMPANY, Ltd.**

NIAGARA FALLS,
 ONTARIO

DESCRIPTIVE
 BOOKLET
 ON YOUR
 REQUEST





On Land And Over Seas

The "National" Services

Railways

Steamships

Express

Telegraphs

High-grade steel Passenger equipment of latest design on transcontinental trains; sleeping and dining car service that is unexcelled; from ocean to ocean and between all important points.

Freight trains to carry the products from the chief productive areas, and to market the manufactured goods. They reach, direct all of the great ports in the Dominion.

Sixty ships, under the flag of **Canadian Government Merchant Marine, Limited**, are in service between Atlantic and Pacific coast points, in Canada and the chief ports abroad, engaged in the business of expanding Canada's foreign trade.

CANADIAN NATIONAL RAILWAYS

CANADIAN GOVERNMENT MERCHANT MARINE, LIMITED.

"The National Way"

MACDONALD MFG. CO., Limited

Toronto - Canada

Manufacturers of
PLAIN and LITHOGRAPHED
CONTAINERS

for

Jam	Lard
Fruit	Oil
Vegetables	Paint
Meat	Varnish
Syrup	Tobacco
Butter	Talcum
Biscuits	Tea

Grocers' Sundries
Druggists' Sundries

Also Toys, Novelties, Tags and Advertising Signs

Well packed is half sold
Make your containers advertise you

Office and Works :
145 Spadina Avenue

Shurly & Derrett Limited

TORONTO



Manufacturers of
TWINES
of all kinds



The
Original
and
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MERITS OF —

Minard's
Liniment

Office and Laboratory : Yarmouth, N.S.
Branch Factory : St. John's, Newfoundland

Bureau of Canadian Information



THE CANADIAN PACIFIC RAILWAY, through its Bureau of Canadian Information, will furnish you with the latest reliable information on every phase of industrial and agricultural development in Canada. In the Reference Libraries maintained at Chicago, New York and Montreal are complete data on natural resources, climate, labor, transportation, business openings, etc., in Canada. Additional data is constantly being added.

No charge or obligation attaches to this service. Business organizations are invited to make use of it.

CANADIAN PACIFIC RAILWAY
Department of Colonization and Development

65 E. Ontario St. Chicago 335 Windsor Station Montreal 1270 Broadway New York

Cunard Service Returning

Five New Steamers to run from Montreal to Liverpool and London next May

The resumption of their Canadian service next May by the Cunard Steamship Line has been officially announced by the Robert Reford Company, Cunard agents in Montreal. Five new oil burning steamers are to be put into commission and will run between Montreal and Liverpool and Montreal and London via Plymouth and Cherbourg.

The Canadian service was discontinued at the outbreak of the war when the company's ships were taken over by the British Government. All the ships were torpedoed so the company resumes the service with an entirely new fleet.

The five liners are: *Antonia*, 538 feet long by 65 feet beam, gross tonnage 14,000; *Andania*, sister ship of the *Antonia*; *Ausonia*, same type as above; *Albania*, 540 feet long by 64 feet beam, gross tonnage 13,000; and *Tyrrhenia*, 550 feet long by 70 feet beam, gross tonnage, 16,700.

Adania and *Antonia*, May 27th, will provide a fortnightly service between Montreal and Liverpool. *Albania*, May 6th, will sail from London via Southampton to Quebec and Montreal and eastbound from Montreal direct to London. *Tyrrhenia*, May 20th, and *Ausonia*, April 8th, will sail from London via Southampton and Cherbourg, and eastbound from Montreal via Plymouth and Cherbourg to London. These steamers will be followed very shortly by the *Ascania*, *Alaunia* and *Aurania*, which will augment the service indicated.

The chartering of these ships is an indication that there is renewed activity in the lumber trade. During the past few weeks there has been an increase in the amount of lumber leaving the North Pacific and charters have been announced from many other ports to the south.

Recent Trade Enquiries

A list of Enquiries Received from Various Sources including the Canadian Trade Mission, London; the Canadian Trade Commission, Ottawa; the Department of Trade and Commerce, Ottawa; and the Commercial Intelligence Department, C. M. A. Toronto.

FOREIGN

774. A gentleman in London, England, who is in touch with buyers in Egypt and Syria, desires to be put in touch with Canadian producers of canned goods, cheese, bacon, hams, sanitary appliances and household appliances.
775. A provision merchant in Georgetown, British Guiana, is seeking connection with Canadian producers of flour, grains and general provisions.
776. London Office: A Canadian firm is considering opening an office in London, England, and is anxious to get in touch with some other Canadian manufacturer who is planning a similar move.
777. Food Products, etc.—An importer of Marseilles is desirous of getting in touch with Canadian importers of food products, pharmaceutical supplies, chemical products, textiles, skins and hides, with a view to being represented. Firm was founded in 1910; appears to be an important one. References.
778. Apples, Flour, Fish—A commission merchant of Havana, Cuba, is seeking connections with Canadian exporters of the following articles: apples, flour (wheat), codfish, potatoes, and canned fish. Reference.
779. A Manchester firm inquire for (unpapered) lapping boards in the following sizes: 26 inches by 8 inches, and 29 inches by 8 inches in thickness, both of 1/16-inch and 1/8-inch.
780. A Manchester firm are prepared to receive samples of lapping boards (white papered) in the following sizes: 26 inches by 6 inches by 1/8-inch; 28 inches by 8 inches by 1/8-inch; 30 inches by 8 inches by 1/8-inch; 25 inches by 6 inches by 1/4-inch; 19 inches by 6 inches by 1/4-inch.
781. A Manchester firm are open to consider samples and prices of lapping boards (unpapered and rounded edges). The following are the sizes required: 27 inches by 8 inches by 1/4-inch; 17 inches by 6 inches by 1/4-inch; 25 inches by 5 inches by 1/4-inch; 29 inches by 7 inches by 3/8-inch; 29 inches by 8 inches by 3/8-inch; 32 inches by 7 inches by 3/8-inch; 19 inches by 6 inches by 4/8-inch.

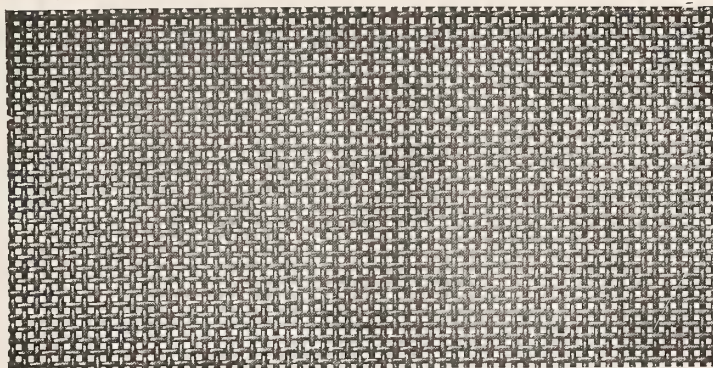
THE B. GREENING WIRE CO. LIMITED

MANUFACTURERS OF

WIRE CLOTH

WIRE ROPE

PERFORATED METALS



Hamilton, Ont.

Montreal, Que.

Buyers' Guide to Canadian Manufactures

List of Articles which will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. Rates for insertion in this department, \$4.00 per heading per year (12 insertions).

ABRASIVES

- *Canadian Hart Wheels, Limited, Hamilton, Ont.
- *Dominion Abrasive Wheel Co., New Toronto, Ont.
- *Norton Company of Canada, Ltd., Hamilton, Ont.

ACCOUNT BOOKS

- *The Brown Bros., Ltd., Toronto.

- ACCUMULATORS, hydraulic
- *The Hydraulic Machinery Co., Limited, Montreal.

ACETYLENE GAS

- *The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACETYLENE GAS BURNERS

- Economic Acetylene Burner Co., Toronto, Ont.
- *The Prest-O-Lite Company of Canada, Ltd., Toronto, Ont.

ACIDS

- *The Grasselli Chemical Co., Ltd., Toronto.
- *The Nichols Chemical Co., Ltd., Montreal, Que.

ADVERTISING NOVELTIES

- Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES

- Charles Gurd & Co., Ltd., Montreal, Que.
- J. J. McLaughlin, Ltd., Toronto.

AIR COMPRESSORS

- *Canadian Ingersoll-Rand Co., Sherbrooke, Que.
- *Smart-Turner Machine Co., Ltd., Hamilton, Ont.

AIR LIFT PUMPS

- *Canadian Ingersoll-Rand Co., Sherbrooke, Que.

ALCOHOL

- *Canadian Industrial Alcohol Company, Ltd., Montreal, Que.

ALKALIES

- Brunner, Mond Canada, Limited, Amherstburg, Ont.

ALUMINUM

- *Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto.

ALUMINUM COOKING UTENSILS

- "Ideal" Aluminum Products, Ltd., Toronto.

AMMONIA

- Canadian Ammonia Co., Ltd., Toronto, Ont.

ANCHORS, all steel

- Beauchemin & Fils, Ltd., Sorel, Que.

ANGLE BARS

- *Burlington Steel Co., Ltd., Hamilton, Ont.
- *MacKinnon Steel Co., Limited, Sherbrooke, Que.
- *The Steel Company of Canada, Ltd., Hamilton, Ont.

ARSENIC

- *Deloro Smelting & Refining Co., Limited, Deloro, Ont.

ARTIFICIAL LIMBS

- Chesley Artificial Limb Co., Ltd., Hantsport, N.S.

ASBESTOS

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEATHING

- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS SHEET AND PISTON PACKINGS

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS STEAM PIPE AND BOILER COVERINGS

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

ASBESTOS TEXTILES

- Atlas Asbestos Company, Limited, Montreal, Que.
- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

AUTOMOBILE PARTS

- *Dominion Forge & Stamping Co., Walkerville, Ont.

AUTOMOBILE TIRES

- Ames-Holden-McCreedy, Limited, Montreal, Que.

AWNING CORD (cotton)

- Hamilton Cotton Co., Hamilton, Ont.

AXLES

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL

- Alonzo W. Spooner, Ltd., Port Hope, Ont.
- Beveridge Supply Co., Limited, Montreal, Que.

- *Hoyt Metal Co., Toronto, Ont.
- Magnolia Metal Co. of Canada, Ltd., Montreal, Que.

- *The Canada Metal Co., Toronto, Ont.

- *Tallman Brass & Metal, Ltd., Hamilton, Ont.

BAGS, Cotton

- The Canadian Bag Co., Limited, Montreal, Que.

BAGS, jute

- The Canadian Bag Co., Limited, Montreal, Que.

BAGS, travelling

- J. Eveleigh & Co., Ltd., Montreal.
- Lamontague, Ltd., Montreal, Que.
- *The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

BAND RESAWS

- *Canada Machinery Corporation, Limited, Galt, Ont.
- *P. B. Yates Machine Co., Ltd., Hamilton, Ont.

BAND SAWS

- *E. C. Atkins & Co., Inc., Hamilton, Ont.

BANK FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK AND OFFICE RAILINGS AND CAGES

- *Canada Wire and Iron Goods Co., Hamilton, Ont.
- *Dennis Wire & Iron Works Co., London, Ont.
- *The Geo. B. Meadows, Toronto, Wire, Iron & Brass Works Co., Ltd., Toronto, Ont.

BARRELS, steel, and containers

- *Smart-Turner Machine Co., Ltd., Hamilton, Ont.

BAR, iron

- London Rolling Mill Co., Ltd., London, Ont.

BAR, steel

- London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS

- A. J. Reach Co., Brantford, Ont.

BATHS, enamelled

- Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry

- *The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Flashlight

- *The Canadian National Carbon Co., Ltd., Toronto, Ont.

BATTERIES, Storage

- *The Canadian National Carbon Co., Ltd., Toronto, Ont.

BEARINGS, pillow block and upright

- *Canadian Fairbanks-Morse Company, Ltd., Montreal, Que.

BELT HOOKS

- *Torrington Company, Limited, Upper Bedford, Que.

BELTING CHAINS

- *Canadian Link-Belt Company, Ltd., Toronto, Ont.

BELTING, elevator

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather

- The Beardmore Belting Co., Ltd., Toronto, Ont.

- *J. L. Goodhue & Co., Danville, Que.

- *McArthur Beltings, Limited, Brockville, Ont.

- *The D. K. McLaren Belting Co., Ltd., Montreal, Que.

- *The J. C. McLaren Belting Co., Ltd., Montreal, Que.

BELTING, rubber

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

- *Gutta Percha and Rubber Ltd., Toronto, Ont.

BELTING, stitched cotton duck

- *Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS

- The Crown Lumber Co., Woodstock, Ont.

BISCUITS

- The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS

- *A. C. Leslie & Co., Montreal, Que.

BLANKETS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

- J. Walshaw & Son, Ltd., Bolton, Ont.

BLANKETS, horse

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

- J. Walshaw & Son, Ltd., Bolton, Ont.

BLASTING ACCESSORIES

- Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER

- *Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS

- *The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

BOATS OF ALL KINDS

- Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOBBINS

- Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

BOILER COMPOUND

- Beveridge Supply Co., Limited, Montreal, Que.

BOILER COMPOUND AND OILS

- Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILER GRAPHITE

- Black Donald Graphite Company, Limited, Calabogie, Ont.

BOILER LININGS AND COVERINGS

- Beveridge Supply Co., Ltd., Montreal, Que.

BOILERS

- *Canadian Mead Morrison Co., Ltd., Montreal, Que.

- *Goldie & McCulloch Co., Limited, Galt, Ont.

- *E. Leonard & Sons, Ltd., London, Ont.

- J. & R. Weir, Montreal, Que.

- Taylor-Forbes Co., Ltd., Guelph

- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, hot water or steam

- Warden King, Ltd., Montreal.

BOILERS, steam

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BOILERS, steam and brass work

- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BOLTS AND NUTS

- *The Canadian Tube & Iron Co., Ltd., Montreal, Que.

- *The National Acme Mfg. Co., Montreal, Que.

- *The Steel Company of Canada, Ltd., Hamilton, Ont.

BOOKBINDERS

- *The Brown Bros., Ltd., Toronto.

BOOKCASES

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

- BOOKCASES, sectional (Gunn)
- The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKS, blank

- *The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES

- Ames-Holden-McCreedy, Limited, Montreal, Que.

- J. Leckie Co., Ltd.

- The John Ritchie Co., Ltd., Quebec, Que.

- BOXES, cellular and fibre board
- *Hinde & Dauch Paper Co. of Canada, Limited, Toronto.

- *Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

- BOXES, rattle and soap
- The Arlington Co. of Canada, Ltd., Toronto, Ont.

- BOXES, steel shop
- *Steel Trough and Machine Co., Ltd., Tweed, Ont.

- BOXES AND SHOOKS, wooden
- The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden

- Barchard & Co., Ltd., Toronto.

BRAKE SHOES

- *Canadian Hart Wheels, Limited, Hamilton, Ont.

BRANDS, burning

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

- BRASS AND BRONZE WIRE
- *Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

BRASS ENGRAVERS

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS

- *The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

- Sully Brass Foundry, Limited, Toronto

- *Tallman Brass & Metal, Ltd., Hamilton, Ont.

BRASS GOODS

- *The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
- *The Kerr Engine Co., Limited, Walkerville, Ont.

BRASS RODS, SHEETS AND PLATES

- *Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

BRASS SHEETS AND PLATES

- *Copper Products, Ltd., Montreal, Que.

BRASS TUBING, seamless

- Canadian Seamless Wire Co., Ltd., Toronto, Ont.
- *Copper Products, Ltd., Montreal, Que.

BRASS WIRE

- Canadian Seamless Wire Co., Ltd., Toronto.

BRASS WORK, church

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special

- *Booth-Coulter Copper & Brass Co., Ltd., Toronto.
- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

BRICK

- National Brick Co. of Laprairie, Laprairie, Que.

BRICK, enamel

- National Brick Co. of Laprairie, Laprairie, Que.

BRICK, pressed

- National Brick Co. of Laprairie, Laprairie, Que.

BRICK, rubbing

- *Canadian Hart Wheels, Limited, Hamilton, Ont.

BRICK, sewer.

- National Brick Co. of Laprairie, Laprairie, Que.

BRIDGES, Railway and Highway

- *Canadian Des Moines Steel Co., Limited, Chatham.
- *Hamilton Bridge Works Co., Ltd., Walkerville, Ont.

- *The Canadian Bridge Co., Ltd., Hamilton, Ont.

- *McGregor & McIntyre, Ltd., Toronto, Ont.

- *Dominion Bridge Co., Montreal.

- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.

BROOMS

- Simms, T. S., & Co., Limited, St. John, N.B.
- Stevens-Hepner Co., Limited, Port Elgin, Ont.

BRONZE SHEETS, RODS, PLATES

- *Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.
- Que.
- *Copper Products, Ltd., Montreal,

BRONZE TUBING, seamless

- *Copper Products, Ltd., Montreal, Que.

BRUSHES

- Simms, T. S., & Co., Limited, St. John, N.B.
- Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon

- *Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS

- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.
- *The Bennett & Wright Co., Ltd., Toronto, Ont.

BUILDING FELT AND PAPER

- Beveridge Supply Co., Limited, Montreal, Que.

- *Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

- *The Barrett Co., Ltd., Toronto and Montreal.

BUNGS, wooden for barrels

- Wm. H. White, Ville St. Pierre, Montreal, Que.

BUCKLES, shoe and coat

- Parmenter & Bulloch Co., Limited, Gananoque, Ont.

BURLAPS

- The Canadian Bag Co., Limited, Montreal, Que.

BURLAPS, decorative

- Dominion Oil Cloth and Linoleum Co., Limited, Montreal, Que.

CABLES, electric light, power, telephone and telegraph

- *Northern Electric Company, Limited, Montreal, Que.
- *Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

CABLES, wire

- *The Dominion Wire Rope Co., Ltd., Montreal, Que.
- *The B. Greening Wire Co., Ltd., Hamilton, Ont.

CALENDARS, ADVERTISING

- NOVELTIES, etc.
- Lawson & Jones, Ltd., London.

CAMERAS

- Canadian Kodak Co., Ltd., Toronto, Ont.

CAMPERS' OUTFITTERS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANADA SILVER

- *Brown's Copper and Brass Rolling Mills, Ltd., New Toronto.

CANOEES

- Peterboro Canoe Co., Ltd., Peterboro, Ont.
- The "Canadian" Canoe Co., Ltd., 216 Rink St., Peterborough, Ont.

CANS, baking powder, etc.

- American Can Co., Montreal (Que.) and Hamilton (Ont.).
- A. R. Whittall Can. Co., Ltd., Montreal, Que.
- *MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, fruit

- American Can Co., Montreal (Que.) and Hamilton (Ont.).
- A. R. Whittall Can. Co., Ltd., Montreal, Que.
- *MacDonald Mfg. Co., Ltd., Toronto, Ont.

CANS, iron, lead and putty

- A. R. Whittall Can. Co., Ltd., Montreal, Que.

CANS, tin

- A. R. Whittall Can. Co., Ltd., Montreal, Que.
- American Can Co., Montreal (Que.) and Hamilton (Ont.).
- *MacDonald Mfg. Co., Ltd., Toronto, Ont.

CAPS, cloth

- John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE

- *Canada Carbide Co., Ltd., Montreal, Que.

CARBONS-PROJECTOR

- *Canadian National Carbon Co., Toronto, Ont.

CARBONIC ACID GAS

- *Canadian Carbonate Co., Montreal.

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

CARPETS AND RUGS

- Toronto Carpet Mfg. Co., Limited, Toronto.

CARRIERS

- *Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARRIERS, box and barrel

- *Canadian Mathews Gravity Carrier.

CARRIERS, brick

- *Canadian Mathews Gravity Carrier Co., Limited, Toronto.
- *Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS

- *National Steel Car Co., Ltd., Hamilton, Ont.

CARS, industrial

- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.

CARTONS, lithographed

- Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.
- Harris Lithographing Co., Ltd., Toronto, Ont.

CASTINGS, Alloy

- *The Electric Steel & Metals Co., Ltd., Welland, Ont.

- CASTINGS, aluminum, brass and bronze

- *Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- Sully Brass Foundry, Limited, Toronto.

CASTINGS, grey iron

- *Canadian Rumely Co., Ltd., Toronto, Ont.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CASTINGS, malleable iron

- *Galt Malleable Iron Co., Ltd., Galt, Ont.
- Mapleleaf Manufacturing Company, Smith's Falls, Ont.

CASTINGS, steel

- Beauchemin & Fils, Ltd., Sorel, Que.
- *Canadian Steel Foundries, Ltd., Montreal, Que.
- *Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
- *Electric Steel & Metals Co., Ltd., Welland, Ont.
- *Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS

- Grip, Ltd., Toronto, Ont.

CATALOGUE COVERS, by new lithographing process

- Harris Lithographing Co., Ltd., Toronto, Ont.

CAUSTIC SODA

- *Canadian Salt Co., Ltd., Windsor.

CEMENT WATERPROOFING

- *Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

CEMENTS, High Temp.; plastic, liquid

- Beveridge Supply Co., Limited, Montreal, Que.

CENTRIFUGAL PUMPS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

CHAINS, for elevators, conveyors and drives

- *Canadian Link-Belt Company, Ltd., Toronto, Ont.
- Dodge Manufacturing Co. of Canada, Ltd., Toronto.

CHAIRS

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

CHAIRS; Folding and Assembly Seating

- Strafford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered

- Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS

- Canadian Laboratory Supplies, Ltd., Toronto, Ont.
- *The Grasselli Chemical Co., Ltd., Toronto, Ont.
- *The Nichols Chemical Co., Ltd., Montreal, Que.

CHEMISTS, industrial

- *Milton Hersey Co., Montreal.

CHICLETES AND CHEWING GUM

- Canadian Chewing Gum Co., Ltd., Toronto, Ont.

CIRCULAR CUTTERS, solid steel

- *Galt Knife Co., Ltd.
- The Peter Hay Knife Co., Ltd., Galt, Ont.

CIRCULAR SAWS

- *E. C. Atkins & Co., Inc., Hamilton, Ont.

CLAM SHELL BUCKETS

- *Canadian Mead Morrison Co., Ltd., Montreal, Que.

CLOCKS, time

- *International Business Machines Co., Ltd., Toronto, Ont.

CLOCKS, watchmen's

- *The Bennett & Wright Co., Ltd., Toronto, Ont.

CLOSET SEATS

- *Goderich Organ Co., Goderich, Ont.

CLOTHING

- John W. Peck & Co., Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats

- *A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw

- The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton

- Hamilton Cotton Co., Hamilton, Ont.

COAL

- *Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
- Standard Fuel Co., Toronto, Ont.

COBALT OXIDE

- *Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

- The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COBALT METAL

- *Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

COFFEE

- S. H. Ewing & Sons, Montreal.

COLD DRAWN SHAPES, flats, squares and hexagons

- *The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
- *Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS

- *John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS

- The Arlington Co. of Canada, Ltd., Toronto, Ont.

Collars

- "Kantcrack" Composition
- Parsons & Parsons Canadian Co., Hamilton, Ont.

COLORS

- *A. Ramsay & Son Co., Montreal.

COMBS, fine dressing and name

- The Arlington Co. of Canada, Ltd., Toronto

COMMERCIAL STATIONERY

- *Brown Bros., Ltd., Toronto, Ont.

CONCRETE COATINGS, PAINTS, Etc.

- *The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

CONCRETE HARDENER AND WATERPROOFER

- Beveridge Supply Co., Limited, Montreal, Que.
- Sturgeons Limited, Toronto.

CONDENSERS, Barometric

- *Canadian Ingersoll-Rand Co., Sherbrooke, Que.

CONDENSERS, jet and surface

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

CONDENSERS, rotary jet

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

CONDUIT FOR INTERIOR WIRING

- *Conduits Co., Ltd., Toronto, Ont.
- *National Conduit Co., Limited, Toronto.

- CONFECTIONERY**
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Ltd., Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.
- CONTAINER BOARD**—strong container
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
- CONTRACTOR'S PLANT**
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
- CONVEYORS**
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
- COPPER**
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.
- COPPER, SHEETS, PLATES, BARS, RODS**
*Brown's Copper and Brass Rolling Mills, Ltd., New Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
*Copper Products, Ltd., Montreal, Que.
- COPPERSMITHS**
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- COPPER TUBING, seamless**
*Copper Products, Ltd., Montreal, Que.
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- COPPER WIRE**
Canadian Seamless Wire Co., Ltd., Toronto, Ont.
*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.
- COPYRIGHTS**
Harold C. Shipman & Co., Ottawa, Ont.
- CORKS**
S. H. Ewing & Sons, Montreal, Que.
- CORK CARPET**
Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.
- CORRUGATED PAPER BOXES**
Corrugated Paper Box Co., Ltd., Toronto, Ont.
*Hinde & Dauch Paper Co. of Canada, Limited, Toronto.
Standard Paper Box Company, Ltd., Montreal, Que.
*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.
- CORSETS**
Dominion Corset Co., Quebec, Que.
- COTTONS**
*Montreal Cottons, Ltd., Valleyfield, P.Q.
- COTTONADES**
Hamilton Cotton Co., Hamilton, Ont.
- COUPLERS**
*Canadian Steel Foundries, Ltd., Welland, Ont.
- CRANES**
*Northern Crane Works, Walkerville, Ont.
*The Herbert Morris Crane and Hoist Co., Ltd., Niagara Falls, Ont.
- CREAM CHEESE, Ingersoll**
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
- CREAM SEPARATORS AND MILK CLARIFIERS**
De Laval Dairy Supply Co., Peterboro, Ont.
- CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES**
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
- CREOSOTED MATERIALS**
*The Barrett Co., Ltd., Toronto and Montreal.
- CRUSHERS, Rock and Ore**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- CUPOLAS**
*Northern Crane Works, Ltd., Walkerville, Ont.
- CUPS, presentation**
Standard Silver Co., Toronto, Ont.
- CURTAINS, chenille**
Hamilton Cotton Co., Hamilton, Ont.
- CUTLERY**
Standard Silver Co., Toronto, Ont.
- CUTTERS, machine**
*Pratt & Whitney Co., Dundas, Ont.
- DECALCOMANIA TRANSFERS**
Canada Decalcomania Co., Toronto, Ont.
- DENIMS**
Hamilton Cotton Co., Hamilton, Ont.
- DERAILS**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- DESIGNERS AND PRINTERS OF BOOKLETS, Etc.**
Grip, Ltd., Toronto, Ont.
- DESIGNERS OF LABOR SAVING DEVICES**
Harold C. Shipman & Co., Ottawa, Ont.
- DESKS**
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
The Macey Office Equipment Co., Toronto.
- DIE CASTINGS**
*Tallman Brass & Metal, Limited, Hamilton, Ont.
- DIES**
*Butterfield & Co., Rock Island, P.Q.
*Pratt & Whitney Co., Dundas, Ont.
- DIES, for metal stampings.**
Larsen & Shaw, Ltd., Walkerton.
- DINING ROOM SUITES**
The George McLagan Furniture Co., Ltd., Stratford, Ont.
- DISINFECTING APPARATUS**
Sprimotor Co., London, Ont.
- DOOR HANGERS**
*Richards Wilcox Canadian Co., Ltd., London, Ont.
- DREDGES**
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
- DRILL PRESSES**
*Canada Machinery Corporation, Ltd., Galt, Ont.
- DRILL SHARPENERS**
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
- DRILLS**
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*Pratt & Whitney Co., Dundas, Ont.
- DRIFT BOLTS OR SPIKES**
London Rolling Mill Co., Ltd., London, Ont.
- DROP HAMMERS**
*Canada Machinery Corporation, Ltd., Galt, Ont.
- DRUMS, steel, and containers**
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
- DRY COLORS**
*The Imperial Varnish & Color Co., Ltd., Toronto.
- DUMB WAITERS**
Turnbull Elevator Mfg. Co., Toronto, Ont.
- DURABLE WIRE ROPE**
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
- DYNAMITE**
Canadian Explosives, Ltd., Montreal, Que.
- DYNAMOS**
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
- DYNAMOS, plating**
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
- EIDERDOWN**
Galt Knitting Co., Ltd., Galt, Ont.
- ELECTRICAL AND GAS FIXTURES**
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.
*Tallman Brass & Metal, Ltd., Hamilton, Ont.
- ELECTRIC APPLIANCES**
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
- ELECTRICAL COMPOUNDS**
Standard Paint Co. of Canada, Ltd., Montreal, Que.
- ELECTRIC PLATE WARE**
Roden Bros., Ltd., Toronto, Ont.
- ELECTRODES, carbon**
*Canadian National Carbon Co., Ltd., Toronto, Ont.
- ELECTROTYPING**
Central Press Agency, Ltd., Toronto.
- ELECTRICAL SUPPLIES**
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
*Jones & Moore Electric Co., Ltd., Toronto, Ont.
*Northern Electric Co., Ltd., Montreal, Que.
- ELECTRO-SILVER PLATED WARE**
Standard Silver Co., Toronto, Ont.
- ELEVATING MACHINERY**
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
- ELEVATORS**
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
Turnbull Elevator Mfg. Co., Toronto, Ont.
*The Watrous Engine Works Co., Ltd., Brantford, Ont.
*Northern Crane Works, Ltd., Walkerville, Ont.
- ELEVATORS FOR ALL PURPOSES**
*The Watrous Engine Works Co., Ltd., Brantford, Ont.
- ELEVATOR GATES AND DOORS**
Turnbull Elevator Mfg. Co., Ltd., Toronto, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
- ELEVATOR GUARDS**
*The Geo. B. Meadows, Toronto.
Iron & Brass Goods Works Co., Ltd., Toronto, Ont.
*Canada Wire and Iron Goods Co., Hamilton, Ont.
- EMERY GRINDERS**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- EMERY WHEELS**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- ENAMELS**
Dominion Paint Works, Limited, Walkerville, Ont.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
- ENAMEL AND TIN WARE**
*McClary Mfg. Co., London, Ont.
- ENGINES**
*E. Leonard & Sons, Limited, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*The Watrous Engine Works Co., Ltd., Brantford, Ont.
- ENGINES, gas and gasoline**
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Hamilton Motor Works, Ltd., Hamilton, Ont.
*Massey-Harris Co., Ltd., Toronto.
- ENGINES, gasoline, tractor, plowing and threshing**
Sawyer-Massey Co., Ltd., Hamilton, Ont.
- ENGINES, hoisting**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- ENGINES, marine, gasoline and kerosene**
Bruce, Stewart & Co., Ltd., Charlottetown, P.E.I.
- ENGINES, steam plowing and threshing**
Sawyer-Massey Co., Ltd., Hamilton, Ont.
- ENGRAVERS, photo**
Grip, Ltd., Toronto, Ont.
- ENGRAVERS, half-tone**
Grip, Ltd., Toronto.
- ENGRAVERS AND PRINTER'S steel plate**
American Bank Note Co., Ottawa, Ont.
- ENGRAVERS AND PRINTERS bank note**
American Bank Note Co., Ottawa, Ont.
- ENGRAVING**
*J. L. Jones Engraving Co., Toronto, Ont.
- ENGRAVING, copper and steel plate**
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.
- ENSILAGE AND STRAW CUTTERS**
J. Fleury's Sons, Aurora, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
- ENVELOPES**
*Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.
- EXPANSION BOLTS**
Beveridge Supply Co., Limited, Montreal, Que.
- EXPERTS IN PATENT CAUSES**
*Ridout & Maybee, Toronto, Ont.
- EXPLOSIVES, high**
Canadian Explosives, Ltd., Montreal, Que.
- FACE PLATE JAWS**
*Ker & Goodwin, Brantford, Ont.
- FACTORY SUPPLIES, cheese and creamery**
De Laval Dairy Supply Co., Ltd., Montreal, Que.
- FANS**
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
- FENCING, wire**
*C. H. Johnson & Sons, Ltd., Montreal, Que.
- FELTS, pulp and paper makers**
Ayers, Ltd., Lachute Mills, P.Q.
- FENCES AND GATES**
*Dennis Wire & Iron Works Co., London, Ont.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Frost Steel & Wire Company, Limited, Hamilton, Ontario.
- FIBRE PAIRS**
*The E. B. Eddy Co., Ltd., Hull, Que.
- FIBRE (vulcanized), sheets, rods, tubes, etc.**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- FIBREBRICK, Plastic, jointless**
Beveridge Supply Co., Limited, Montreal, Que.
- FILES**
Henry Disston & Sons, Ltd., Toronto, Ont.
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*The Nicholson File Co., Port Hope.
The Ingersoll File Company, Ltd., Ingersoll, Ont.
- FILING CABINETS**
*Office Specialty Co., Newmarket, Ont.
- FILING DEVICES**
The Macey Office Equipment Co., Toronto.
- FILING EQUIPMENT, wood & steel**
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
- FILING SYSTEMS**
*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.
- FIRE ALARMS**
*Northern Electric Co., Ltd., Montreal, Que.

- FIRE BRICK**
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
- FIRE BRICK AND CLAY**
Dominion Fire Brick & Clay Products, Ltd., Moose Jaw, Sask.
- FIRE BRICK, PLASTIC**
Eberidge Supply Co., Limited, Montreal, Que.
- FIRE DOOR HARDWARE**
*Richard Wilcox Canadian Co., Ltd., London, Ont.
- FIRE DOORS**
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.
- FIRE ENGINES**
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Watrous Engine Works Co., Ltd., Brantford, Ont.
- FIRE ESCAPES**
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
- FIRE EXTINGUISHERS**
*A. B. Ormsby Co., Ltd., Toronto.
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Montreal, Que.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
- FIRE FIGHTING APPARATUS**
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Watrous Engine Works Co., Ltd., Brantford, Ont.
- FIRE HOSE**
*Canadian Consolidated Rubber Co. of Canada, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
- FIRE PREVENTION MATERIAL**
*Chicago Bridge & Iron Works Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
- FIRE-PROOF WINDOWS AND DOORS**
*Canadian Metal Window & Steel Products, Limited, Toronto.
*A. B. Ormsby Co., Ltd., Toronto.
*Pedlar People, Ltd., Oshawa, Ont.
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
- FIRE PROTECTION SYSTEMS**
*Canadian Des Moines Steel Co., Limited, Chatham.
- FIRE SPRINKLER SYSTEMS**
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Bennett & Wright Co., Ltd., Toronto, Ont.
*Purdy Mansell Co., Toronto, Ont.
- FIRE AND WATER DEPARTMENT**
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.
- FISH, Atlantic Sea-Foods**
Maritime Fish Corporation, Ltd., Montreal, Que.
- FITTINGS FOR SOIL PIPE**
Anthes Foundry, Ltd., Toronto.
- FITTINGS, steam**
Warden King Ltd., Montreal, Que.
- FLOORING, hardwood**
Seaman Kent Co., Ltd., Meaford, Ont.
- FOLDING PAPER BOXES**
Standard Paper Box Company, Ltd., Montreal, Que.
- FORGES**
*Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
- FORGINGS**
*Canada Foundries & Forgings Co., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- FORGINGS, drop**
*Dominion Forge & Stamping Co., Walkerville, Ont.
- FOUNDRY EQUIPMENT**
*Northern Crane Works, Ltd., Walkerville, Ont.
- FOUNTAIN FRUITS AND JUICES**
J. J. McLaughlin, Ltd., Toronto.
- FROGS AND CROSSINGS, manganese**
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
- FUEL**
Standard Fuel Co., Toronto, Ont.
- FUR GARMENTS, men's and women's**
Holt, Renfrew, Ltd., Quebec.
- FUR GOODS**
John W. Peck & Co., Ltd., Montreal, Que.
- FURNACES**
*McClary Mfg. Co., London, Ont.
- FURNITURE; Camp and Verandah and Novelties**
The Stratford Mfg. Co., Limited, Stratford, Ont.
- FURNITURE, hall**
The George McLagan Furniture Co., Ltd., Stratford, Ont.
- FURNITURE, office**
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
- FURNITURE, reed and rattan**
Imperial Rattan Co., Ltd., Stratford, Ont.
- FUSES**
*Economy Fuse & Mfg. Co., Montreal, Que.
- GALVANIZED IRON**
*A. C. Leslie & Co., Montreal.
- GALVANIZED SHEETS**
*Dominion Sheet Metal Co., Hamilton, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
- GALVANIZERS**
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
*The Pedlar People, Ltd., Oshawa.
- GALVANIZING, custom**
The Gould, Shapley & Muir Co., Ltd., Brantford, Ont.
- GASOLINE ENGINES**
*Ontario Wind & Pump Co., Ltd., Toronto, Ont.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
*The Gould Shapley & Muir Co., Limited, Brantford, Ont.
- GASOLINE FIRE ENGINES**
American LaFrance Fire Engine Company of Canada, Limited, Toronto.
*Watrous Engine Works Co., Ltd., Brantford, Ont.
- GASOLINE STORAGE SYSTEMS, special underground**
*S. F. Bowser & Co., Toronto.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
- GASOLINE**
*The Imperial Oil Co., Ltd., Toronto, Ont.
- GEARS, cut**
*Hamilton Gear and Machine, Toronto.
- GEARS (noiseless, waterproof)**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- GELATINE**
Canada Gelatine Co., Ltd., Brantford, Ont.
- GENERATORS**
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.
*Canadian Westinghouse Co., Ltd., Hamilton, Ont.
- GILDING METAL**
*Copper Products, Ltd., Montreal, Que.
- GLASSWARE**
Dominion Glass Co., Ltd., Montreal, Que.
- GLASSWARE, cut**
Roden Bros., Ltd., Toronto.
- GLASS FOR BUILDINGS**
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
- GLASS BENDERS**
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
- GLASS, mirror**
Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.
- GLOVES AND MITTS**
*A. R. Clarke & Co., Ltd., Toronto.
Craig, Cowan Co., Ltd., Toronto.
- GLUE**
Canada Glue Co., Ltd., Brantford, Ont.
- GOLD-FILLED WIRE AND PLATE**
Canadian Seamless Wire Co., Toronto, Ont.
- GOLD AND SILVER REFINERS**
Canadian Seamless Wire Co., Toronto, Ont.
- GRAIN CRUSHERS, rapid, easy**
J. Fleury's Sons, Aurora, Ont.
- GRAPE JUICE**
J. J. McLaughlin, Ltd., Toronto.
The Welch Co., Ltd., St. Catharines, Ont.
- GRAPHITE, lubricating**
Black Donald Graphite Company, Limited, Calabogie, Ont.
- GRATES**
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
- GRAVITY CARRIERS**
*Canadian Mathews Gravity Carrier Co., Toronto, Ont.
- GRILLES, metal**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
- GRINDING MACHINERY**
*Ford Smith Machine Co., Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
- GRINDING AND POLISHING MACHINERY**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- GRINDING WHEELS**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Norton Company of Canada, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto, Ont.
- GRINDSTONES**
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
- GUNN SECTIONAL BOOKCASES**
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
- GUY ANCHORS**
B. J. Coghlin Co., Ltd., Montreal.
- GYPSON PRODUCTS**
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.
- HACK SAW BLADES AND FRAMES**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- HACK SAW MACHINES**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- HALL FURNITURE**
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.
- HANDLES (axe, pick, sledge hammers, etc.)**
The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.
- HANDLES, wood**
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
- HAND SAWS**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- HANGERS**
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
- HARDWARE**
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
- HARNESSES**
Lamontagne, Ltd., Montreal, Que.
- HATS, ladies' felt and straw**
Toronto Hat Mfg. Co., Toronto.
- HAULAGE, wire rope**
*The Dominion Wire Rope Co., Ltd., Montreal, Que.
- HEADING SAWS**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- HEATERS**
*Watrous Engine Works Co., Ltd., Brantford, Ont.
- HEATERS, feed water**
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
- HEATERS, WATER FEED**
*Mason Regulator & Engineering Co., Ltd., Montreal, Que.
- HEATING APPLIANCES**
*C. A. Dunham Co., Ltd., Toronto.
*The Canadian Blower & Forge Co., Ltd., Kitchener, Ont.
- HEATING SYSTEMS**
*C. A. Dunham Co., Ltd., Toronto.
- HEMLOCK, union and oak sole**
Breithaupt Leather Co., Ltd., Kitchener, Ont.
- HESSIANS**
The Canadian Bag Co., Ltd., Montreal, Que.
- HINGES**
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- HOISTS, electric and pneumatic**
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*Canadian Mead Morrison Co., Ltd., Montreal, Que.
*Northern Crane Works, Ltd., Walkerville, Ont.
- HOSE, fire and rubber**
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Toronto, Ont.
- HOUSES, factory made**
Wm. H. White, Ville St. Pierre, Montreal, Que.
- HYDRAULIC TURBINES**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- ICE CREEPERS**
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
- ICE MACHINE EQUIPMENT**
Canadian Ice Machine Co., Limited, Toronto, Ont.
- ICE-MAKING MACHINERY**
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
- INGOT METALS**
*Brown's Copper & Brass Rolling Mills, Ltd., New Toronto, Ont.
- INSERTED TOOTH SAWS**
*E. C. Atkins & Co., Inc., Hamilton, Ont.
- INSULATING COMPOUNDS**
*The Imperial Varnish & Color Co., Ltd., Toronto.
- INSULATION VULCANIZED FIBRE**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- INTERLOCKING RUBBER TILING**
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto, Ont.
- IRON**
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
- IRON AND STEEL BARS**
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- IRON STAIRWAYS**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
*Dennis Wire & Iron Works Co., London, Ont.
*McGregor & McIntyre, Ltd., Toronto, Ont.
- IRONWORK, architectural**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
- IRONWORK, ornamental**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
- INDUSTRIAL DESIGN PATENTS**
Harold C. Shipman & Co., Ottawa, Ont.
- JAM, canned goods, etc.**
E. D. Smith & Son, Ltd.
- JAPANS, enamels, etc.**
A. Muirhead Co., Ltd., Toronto.
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

JELLY POWDER

S. H. Ewing & Sons, Montreal.

JEWELRY, enamelled souvenir

*Caron Bros., Montreal, Que.

JEWELRY, gold-filled

*Caron Bros., Montreal, Que.

JOINTERS

*Canada Machinery Corporation, Ltd., Galt, Ont.

*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

JOIST HANGERS

*Richards - Wilcox Canadian Co., Ltd., London, Ont.

JUNCTION BOXES, cable

*Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

KINDLING

Standard Fuel Co., Toronto, Ont.

KNIFE GRINDERS

*Canada Machinery Corporation, Ltd., Galt, Ont.

KNITTED GOODS

*Penman's, Ltd., Paris, Ont.

KNIVES

*Galt Knife Co., Ltd., Galt, Ont.

The Peter Hay Knife Co., Ltd., Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper

Henry Diston & Sons, Toronto.

The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES

Canadian Kodak Co., Ltd., Toronto.

LABELS

Lawson & Jones, Ltd., London, Ont.

LABELS, lithographed

Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.

Harris Lithographing Co., Ltd., Toronto, Ont.

LABORATORY SUPPLIES

Canadian Laboratory Supplies, Ltd., Toronto.

LACE LEATHER

F. C. McCordick, St. Catharines, Ont.

*The D. K. McLaren Belting Co., Ltd., Montreal, Que.

*The J. C. McLaren Belting Co., Ltd., Montreal, Que.

LADDERS

Stratford Mfg. Co., Ltd., Stratford, Ont.

LADLES, foundry

*Northern Crane Works, Ltd., Walkerville, Ont.

LAMPS, Gasoline, Vapor.

Coleman Lamp Company, Ltd., Toronto.

LATH

The C. Beck Mfg. Co., Ltd., Pen-tanguishene, Ont.

LATHE CHUCKS

*Ker & Goodwin, Brantford, Ont.

LATHES

*Canada Machinery Corporation, Ltd., Galt, Ont.

LAUNCHES

Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS

Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS

Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled

Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS

Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD

*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal

LEAD GRINDERS

Benjamin Moore & Co., Ltd., Toronto, Ont.

LEAD PIPE

*Hoyt Metal Co., Toronto, Ont.

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

*The Canada Metal Co., Toronto.

LEAD SHEET

Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

LEATHER

The Robson Leather Co., Ltd., Oshawa, Ont.

LEATHER, bookbinders'

Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy

Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS

Lamontagne, Ltd., Montreal, Que.

LEATHER GOODS, Fine

Federated Leather Goods Co., Ltd., Montreal, Que.

Canadian Leather Products, Ltd., Toronto, Ont.

LEATHER, hemlock, union and oak sole

The Breithaupt Leather Co., Ltd., Kitchener, Ont.

LEATHER, patent colt and side leather

*A. R. Clarke & Co., Ltd., Toronto

Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering

Clarke & Clarke, Ltd., Toronto.

LEATHER, upper

A. Davis & Son., Ltd., Kingston, Ont.

King Brothers Co., Ltd., Whitby, Ont.

LINK-BELT, Ewart and saw mill riveted

*Canadian Link-Belt Co., Toronto

LINOLEUM

Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.

LITHOGRAPHERS

American Bank Note Co., Ottawa, Ont.

Consolidated Lithographing and Mfg. Co., Ltd., Montreal, Que.

Harris Lithographing Co., Ltd., Toronto, Ont.

The Federated Press, Limited, Montreal, Que.

LOCKERS

*Canada Wire & Iron Goods Co., Hamilton, Ont.

*Dennis Wire & Iron Works Co., London, Ont.

*Geo. B. Meadows, Wire, Iron and Brass Works Co., Toronto, Ont.

LOCOMOTIVES, industrial

*Montreal Locomotive Works, Ltd., Montreal, Que.

LOCOMOTIVE & MARINE BRASS WORKS

The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOOSE LEAF SYSTEMS

Copeland - Chatterton Co., Ltd., Brampton, Ont.

LUGS, for silos and water tanks

*Ontario Wind Engine & Pump Co., Ltd., Toronto.

LUMBER

The C. Beck Mfg. Co., Ltd., Pen-tanguishene, Ont.

LUMBER, asbestos

*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.

*Bathurst Lumber Co., Ltd., Bathurst, N.B.

*Lumber, red pine and spruce

Gillies Bros., Ltd., Braeside, Ont.

*Lumber, white pine

Gillies Bros., Ltd., Braeside, Ont.

LUMBERING BLANKETS

Slingsby Mfg. Co., Ltd., Brantford, Ont.

MACHINE DESIGNING

Harold C. Shipman & Co., Ottawa, Ont.

MACHINE KNIVES

*Galt Knife Co., Ltd., Galt, Ont.

*E. C. Atkins & Co., Inc., Hamilton, Ont.

Henry Diston & Sons, Toronto.

MACHINE TOOLS

*Canada Machinery Corporation, Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINE WORK, special and repairs

*Canadian Rumely Co., Ltd., Toronto, Ont.

MACHINERY, special, designing and developing

Larsen & Shaw, Ltd., Walkerton.

BAKERS

Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY AND UTENSILS FOR CANDY

Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY AND UTENSILS FOR ICE CREAM

Fletcher Mfg. Co., Ltd., Toronto.

MACHINERY, Conveying

*Canadian Link-Belt Company, Ltd., Toronto, Ont.

*Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

MACHINERY, flour mill

*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

MACHINERY, ice cream

J. J. McLaughlin, Ltd., Toronto.

MACHINERY, grinding

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

*Canadian Mead Morrison Co., Ltd., Montreal, Que.

J. & R. Weir, Montreal, Que.

*Northern Crane Works, Ltd., Walkerville, Ont.

MACHINERY, iron working

*Canada Machinery Corporation, Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill

*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.

*Dominion Engineering Works, Limited, Montreal, Que.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

MACHINERY, punching and shearing

*Canada Machinery Corporation, Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car-shop

*Canada Machinery Corporation, Ltd., Galt, Ont.

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking

Sawyer-Massey Co., Ltd., Hamilton, Ont.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

MACHINERY, sawmill

The E. Long Mfg. Co., Ltd., Orillia, Ont.

P. Payette & Co., Pentanguishene, Ont.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.

MACHINERY, sheet metal working

*Canada Machinery Corporation, Ltd., Galt, Ont.

MACHINERY, woodworking

*Canada Machinery Corporation, Ltd., Galt, Ont.

*Yates, P. B., Machine Co., Ltd., Hamilton, Ont.

Preston Woodworking Machinery Co., Ltd., Preston, Ont.

*The Watrous Engine Works Co., Ltd., Brantford, Ont.

MACHINES, painting

Spramotor Co., London, Ont.

MAGNESITE

*Canadian Carbonate Co., Montreal, Que.

MALLEABLE IRON CASTINGS

Malleable Castings Co., Ltd., Smith's Falls, Ont.

*Galt Malleable Iron Co., Ltd., Galt, Ont.

MARTINGALE RINGS AND SLIDE LOOPS

The Arlington Co. of Canada, Ltd., Toronto, Ont.

MATCHERS

*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

MATCHES

*The E. B. Eddy Co., Ltd., Hull, Que.

MECHANICAL STOKERS

*Under-feed Stoker Co. of Canada, Ltd., Toronto.

METAL, babbitt

Alonzo W. Spooner, Ltd., Port Hope, Ont.

*Canada Metal Co., Toronto, Ont.

METAL CEILINGS

*The Pedlar People, Ltd., Oshawa,

MACHINERY AND UTENSILS FOR

Ont.

*The A. B. Ormsby Co., Ltd., Toronto, Ont.

METAL LATH

*The Pedlar People, Ltd., Oshawa, Ont.

METAL LATH

*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

METAL PACKING

*Garlock Packing Co., Hamilton, Ont.

METAL, spinning and stamping

*The Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.

METAL PROTECTIVE PAINTS

Sturgeons Limited, Toronto.

METAL SAWS

*E. C. Atkins & Co., Inc., Hamilton, Ont.

METAL SHINGLES

*The Pedlar People, Ltd., Oshawa, Ont.

*The A. B. Ormsby Co., Ltd., Toronto, Ont.

MILK DEALERS' MACHINERY AND SUPPLIES

De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

MILLEBOARD, asbestos

*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS

*Pratt & Whitney Co. of Canada, Dundas, Ont.

MILLING MACHINES

*Ford Smith Machine Co., Ltd., Hamilton, Ont.

MILL RIVETED

*Canadian Link-Belt Company, Ltd., Toronto, Ont.

MITTS AND GLOVES, Indian, tan, red deerskins

Holt, Renfrew, Ltd., Quebec, Que.

*A. R. Clarke & Co., Ltd., Toronto.

MIXERS, chocolate, dough and paint

Fletcher Mfg. Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS, Indian tanned leathers

Holt, Renfrew, Ltd., Quebec, Que.

MONEL METAL

*International Nickel Co. of Canada, Ltd., Toronto.

MORTISERS

*Canada Machinery Corporation, Ltd., Galt, Ont.

*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

MOTION PICTURES

Pathoscope of Canada, Limited, Toronto.

Filmcraft Industries, Limited, Toronto, Ont.

MOTOR CARS

*Ford Co. of Canada, Ford, Ont.

MOTORS, electric (alternating current)

*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

*Jones & Moore Electric Co., Ltd., Toronto, Ont.

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

*T. & H. Electric Co., Hamilton, Ont.

MOTORS, electric (direct current)

*Canadian Westinghouse Co., Ltd., Hamilton, Ont.

*Jones & Moore Electric Co., Ltd., Toronto, Ont.

*T. & H. Electric Co., Hamilton.

MOTORS, electric (repairing)

*T. & H. Electric Co., Hamilton.

MOTOR TRUCKS

Mapleleaf Manufacturing Company, Ltd., Montreal, Que.

MOULDERS

*Canada Machinery Corporation, Ltd., Galt, Ont.

*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

NAILS

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

NAILS, copper

Parmenter & Bullock Co., Ltd., Gananoque, Ont.

NAILS, wire

Parmenter & Bullock Co., Ltd., Gananoque, Ont.

NAPHTHA

*The Imperial Oil Co., Ltd., Toronto, Ont.

NICKEL CASTINGS

*International Nickel Co. of Canada, Ltd., Toronto.

NICKEL METAL

*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

*International Nickel Co. of Canada, Ltd., Toronto.

NICKEL OXIDE

*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.

Coniagas Reduction Co., Ltd., St. Catharines, Ont.

*International Nickel Co. of Canada, Ltd., Toronto.

NUTS

*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

*The National Acme Mfg. Co., Montreal, Que.

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

OAKUM, plumbers, Canadian Navy Factory Waste & Metal Co., Montreal, Que.

OAT CRUSHERS AND FLAKERS

J. Fleury's Sons, Aurora, Ont.

OFFICE CHAIRS, Etc.

The Macey Office Equipment Co., Toronto.

OFFICE DESKS

*Goderich Organ Co., Goderich, Ont.

OFFICE EQUIPMENT

*Office Specialty Co., Newmarket, Ont.

OFFICE FURNITURE

*Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

OILS

*A. Ramsay & Son Co., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS

*S. F. Bowser & Co., Toronto, Ont.

OIL STORAGE SYSTEMS, self-measuring

*S. F. Bowser & Co., Toronto, Ont.

OIL COMPANIES

*Canadian Oil Cos., Toronto.

Commercial Oil Co., Ltd., Hamilton, Ont.

*Imperial Oil Co., Toronto.

OILS (petroleum products)

*British American Oil Co., Ltd., Toronto, Ont.

*The Imperial Oil Co., Toronto.

OILS, road

*The Barrett Co., Ltd., Toronto and Montreal.

OILCLOTHS, floor and table

Dominion Oil Cloth and Linoleum Co., Ltd., Montreal, Que.

ORGANS

Casavant Freres, Limitee, St. Hyacinthe, Que.

*Goderich Organ Co., Goderich, Ont.

ORGANS, parlor

*Goderich Organ Co., Goderich, Ont.

ORGANS, pipe

Casavant Freres, Limitee, St. Hyacinthe, Que.

ORGANS, reed

Bell Piano & Organ Co., Ltd., Guelph, Ont.

ORNAMENTAL IRON WORK

*Canada Wire & Iron Goods Co., Hamilton, Ont.

*Dennis Wire & Iron Works Co., London, Ont.

*The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.

*McGregor & McIntyre, Ltd., Toronto, Ont.

OVERALLS

Peerless Overall Co., Rock Island, Que.

Walker Pant & Shirt Co., Walkerville and Chatham, Ont.

OVERCOATINGS

Rosamond Woollen Co., Almonte, Ont.

OVERHEAD RUNWAYS

*MacKinnon Steel Co., Ltd., Sherbrooke, Que.

*Richards-Wilcox Canadian Co. Ltd., London, Ont.

OXY-ACETYLENE WELDING

*L'Air Liquide Society, Montreal, Que.

*The Prest-O-Lite Co., Inc., Toronto

OXYGEN

Dominion Oxygen Co., Ltd., Toronto.

*L'Air Liquide Society, Montreal, Que.

PACKING BOXES

Barchard & Co., Ltd., Toronto.

PACKING, engine

*Garlock Packing Co., Hamilton, Ont.

PACKING, Metallic-Flexible

Beveridge Supply Co., Ltd., Montreal, Que.

PACKING, rubber

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

*Gutta Percha & Rubber Mfg. Co. of Toronto, Ltd.

*Jenkins Bros., Ltd., Montreal, Que.

PAD HOOKS

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

PAIS AND TUBS, wooden

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES

A. Muirhead Co., Ltd., Toronto.

PAINTS AND VARNISHES

A. Muirhead Co., Ltd., Toronto.

Benjamin Moore & Co., Ltd., Toronto, Ont.

Dominion Paint Works, Limited, Walkerville, Ont.

*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.

The Stansland Co., Ltd., Victoria, B.C.

*A Ramsay & Sons Co., Montreal, Que.

Standard Paint Co. of Canada, Ltd., Montreal, Que.

PAINTS, preservative

Dominion Paint Works, Limited, Walkerville, Ont.

Standard Paint Co. of Canada, Ltd., Montreal, Que.

*The Barrett Co., Ltd., Toronto and Montreal.

PAPER BOARDS & BAGS

Beveridge Supply Co., Ltd., Montreal, Que.

PAPER BOXES

Standard Paper Box Company, Ltd., Montreal, Que.

King Paper Box Co., Ltd., Montreal, Que.

PAPER, coated, book and label

*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, coated box board

*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, coated cover

*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, envelope

*Provincial Paper Mills, Ltd., Georgetown, Ont.

PAPER, ledger

*Howard Smith Paper Mills, Ltd., Montreal, Que.

*Rolland Paper Co., Ltd., Montreal, Que.

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, writing

The Toronto Paper Mfg. Co., Cornwall, Ont.

*Howard Smith Paper Mills, Ltd., Montreal, Que.

*Rolland Paper Co., Ltd., Montreal, Que.

PAPERS, building

*Bathurst Lumber Co., Ltd., Bathurst, N.B.

*The Riordon Pulp & Paper Co., Montreal, Que.

Standard Paint Co. of Canada, Ltd., Montreal, Que.

PARLOR SUNDRIES

The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

PATENTS

Fetherstonhaugh & Co., Toronto.

*Ridout & Maybee, Toronto, Ont.

*Harold C. Shipman & Co., Ottawa.

PATENT LITIGATION

*Ridout & Maybee, Toronto, Ont.

*Harold C. Shipman & Co., Ottawa, Ont.

PAVING MATERIAL

*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

PAY ROLL AUDITS

*International Business Machines, Ltd., Toronto, Ont.

PERFORATED METALS

*Canada Wire & Iron Goods Co., Hamilton, Ont.

PERFORATED MUSIC ROLLS

The Otto Higel Co., Ltd., Toronto.

PERFUMES AND TOILET PREPARATIONS

Sovereign Perfumes, Ltd., Toronto.

PETROLEUM PRODUCTS

*The Imperial Oil Co., Ltd., Toronto, Ont.

PHOTO MAILERS

*Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

PIANO ACTIONS

The Otto Higel Co., Ltd., Toronto.

PIANO KEYS

The Otto Higel Co., Ltd., Toronto.

PIANO, player actions

The Otto Higel Co., Ltd., Toronto.

PIANOS AND PLAYER PIANOS

Bell Piano & Organ Co., Ltd., Guelph, Ont.

PIANO STOOLS AND BENCHES

*Goderich Organ Co., Goderich, Ont.

PIG IRON

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

*M. A. Hanna & Co., Toronto.

*Algoma Steel Corporation.

PINS, society, emblems and badges

*Caron Bros., Montreal, Que.

PIPE, cast iron, for water and gas

National Iron Works, Ltd., Toronto, Ont.

PIPE COUPLINGS

*The Steel Co. of Canada, Ltd., Hamilton, Ont.

PIPE COVERINGS

*Eureka Mineral Wood & Asbestos Co., Toronto, Ont.

PIPES, culvert

*The Pedlar People, Ltd., Oshawa, Ont.

PIPE AND NIPPLES, black and galvanized

*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer

Hamilton & Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.

PIPE, soil and fittings

Anthes Foundry, Ltd., Toronto and Winnipeg.

Warden King Ltd., Montreal, Que.

PISTON RODS

*The Canadian Drawn Steel Co., Ltd., Hamilton, Ont.

*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS

*Canada Machinery Corporation, Ltd., Galt, Ont.

*P. B. Yates Machine Co., Ltd., Hamilton, Ont.

PLASTERING TROWELS

*E. C. Atkins & Co., Inc., Hamilton, Ont.

PLOWS

J. Fleury's Sons, Aurora, Ont.

PNEUMATIC DRILLS

*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

PLUMBERS' SUPPLIES

The Garth Co., Montreal, Que.

The James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.

Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

POLE LINE MATERIAL (wooden insulator top pins, side blocks, pole steps, cross arms)

The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

POLES, flag

*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

POLISHING MACHINERY

*Ford Smith Machine Co., Ltd., Hamilton, Ont.

PORK PACKERS AND CHEESE EXPORTERS

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POWDER, blasting

Canadian Explosives, Ltd., Montreal, Que.

POWER TRANSMISSION MACHINERY

Dodge Manufacturing Co. of Canada, Ltd., Toronto.

POWER PRESSES

*Hydraulic Machinery Co., Ltd., Montreal, Que.

PRESSES, hydraulic

*The Hydraulic Machinery Co., Limited, Montreal.

PRESSES, sheet metal stamping

*Canada Machinery Corporation, Ltd., Galt, Ont.

PRESSES, veneer

*Canada Machinery Corporation, Ltd., Galt, Ont.

PRINTING AND LITHOGRAPHING

Lawson & Jones, Ltd., London, Ont.

The Federated Press, Limited, Montreal, Que.

PRINTING & LITHOGRAPHIC INKS.

Charles Bush, Limited, Toronto.

PULLEYS

*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

PULLEYS, Fibre

*The Diamond State Fibre Co. of Canada, Ltd., Toronto.

PULLEYS, wood split

*Bernard Industrial Co., Fortierville, P.Q.

PULLEYS, Wood Split, Iron and steel.

Dodge Manufacturing Co. of Canada, Ltd., Toronto.

PULP, bleached sulphite

*Riordan Sales Co., Ltd., Montreal.

PULP, unbleached sulphite

*Riordan Sales Co., Ltd., Montreal.

PULP, sulphate and sulphite

*Bathurst Lumber Co., Ltd., Bathurst, N.B.

PULP AND PAPER MILL MACHINERY

*The Hydraulic Machinery Co., Limited, Montreal.

PUMPS

*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

*E. Leonard & Sons, Ltd., London, Ont.

*Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

Spramotor Co., London, Ont.

*The Electric Steel & Metals Co., Ltd., Welland, Ont.

PUMPS, boiler feed

*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

PUMPS, centrifugal

Ltd., Walkerville, Ont.

*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

*Canadian Mead Morrison Co., Ltd., Montreal, Que.

*Dominion Engineering Works, Limited, Montreal, Que.

*Dominion Forge & Stamping Co., Ltd., Galt, Ont.

*Smart-Turner Machine Co., Ltd., Hamilton, Ont.

*The Waterous Engine Works Co., Ltd., Brantford, Ont.

- PUMPS, hydraulic**
*The Hydraulic Machinery Co., Limited, Montreal.
- PUMPS, turbine and reciprocating**
*Smart-Turner Machine Co., Ltd., Hamilton, Ont.
- PUNCHES**
*Pratt & Whitney Co., Dundas, Ont.
- RADIATORS**
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.
- RAILS (STEEL)**
*Algoma Steel Corporation.
- RAILINGS, brass and iron**
*Dennis Wire & Iron Works Co., London, Ont.
- RAILWAY SUPPLIES**
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.
- READY-TO-WEAR GARMENTS, ladies'**
H. C. Boulter Co., Ltd., Toronto.
- REAMERS**
*Pratt & Whitney Co., Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.
- RECEPTACLES, fibre**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- REFRIGERATORS**
Sanderson-Harold Co., Ltd., Paris, Ont.
- REFRIGERATING MACHINERY**
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
- REFRIGERATING EQUIPMENT**
Canadian Ice Machine Co., Ltd., Toronto, Ont.
- REFRIGERATORS, store, homes and institutions**
Ham & Nott Co., Ltd., Brantford, Ont.
*John Hillock & Co., Ltd., Toronto.
- REINFORCEMENT BARS**
*Burlington Steel Co., Ltd., Hamilton, Ont.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- REINFORCED CONCRETE**
*Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.
- REINFORCEMENT FOR CONCRETE**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
- REINFORCEMENT FOR CONCRETE ROOFING, metal**
*The Pedlar People, Ltd., Oshawa, Ont.
- REVOLVING DOORS**
*A. B. Ormsby Co., Ltd., Toronto.
- RINGS, gold**
*Caron Bros., Montreal, Que.
- RIVETS**
*Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
- RIVETS, bifurcated and tubular**
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
- RIVETS AND BURS, iron, copper and brass**
Parmenter & Bullock Co., Ltd., Gananoque, Ont.
- ROCK DRILLS**
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
- ROLLING STEEL DOORS**
*A. B. Ormsby Co., Ltd., Toronto.
- ROOFING, metal**
*A. B. Ormsby Co., Ltd., Toronto.
- ROOFINGS, plastic, liquid, rubber**
Beveridge Supply Co., Ltd., Montreal, Que.
- ROOFING, ready to lay**
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*The Barrett Co., Ltd., Toronto and Montreal.
- ROOF TRUSSES**
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal, Que.
- ROPE**
*Doon Twines, Limited, Kitchener, Ontario.
*Shurly & Derrett, Ltd., Toronto.
- ROPE, cotton**
Hamilton Cotton Co., Hamilton, Ont.
- RUBBER FOOTWEAR**
*Gutta Percha & Rubber Ltd., Toronto, Ont.
The Miner Rubber Co., Ltd., Grandy, Que.
Ames—Holden—McCready, Limited, Montreal, Que.
- RUBBER GOODS**
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber Limited, Toronto.
Ames—Holden—McCready, Limited, Montreal, Que.
- RUBBER MACHINERY**
*The Hydraulic Machinery Co., Limited, Montreal.
- RUBBER MILL MACHINERY**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- RUBBER PACKING**
*Garlock Packing Co., Hamilton, Ont.
- RULES**
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.
- SADDLERY HARDWARE**
*Dominion Forge & Stamping Co., Walkerville, Ont.
- SAFES**
*Goldie & McCulloch Co., Ltd., Galt, Ont.
- SALT**
*Canadian Salt Co., Ltd., Windsor, Ont.
Dominion Salt Co., Ltd., Sarnia, Ont.
- SAMPLE CASES**
*The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.
- SAND (For all Purposes)**
Carroll Brothers, Sherston, Ont.
J. Eveleigh & Co., Ltd., Montreal, Que.
- SAND RAMMERS**
*Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
- SANITARY PAPER TOWELS**
*E. B. Eddy Co., Ltd., Hull, Que.
- SASH CORD, cotton**
Hamilton Cotton Co., Hamilton, Ont.
- SAVE-ALLS**
*The Hydraulic Machinery Co., Limited, Montreal.
- SAW SHARPENING MACHINERY**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- SAWS**
*E. C. Atkins & Co., Ltd., Hamilton, Ont.
Henry Disston & Sons, Ltd., Toronto, Ont.
Shurly & Deitrich, Galt, Ont.
- SAWS, cross-cut and band**
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.
- SAWS, circular mill**
Shurly & Deitrich, Galt, Ont.
- SAWS, of all kinds**
Simonds Canada Saw Co., Ltd., Montreal, Que.
- SAWS, rip**
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
Shurly & Deitrich, Galt, Ont.
- SAWMILLS**
*The Watrous Engine Works Co., Ltd., Brantford, Ont.
- SCALES**
*Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
- SCREENS**
*Canada Wire & Iron Goods Co., Hamilton, Ont.
- SCREEN DOORS AND WINDOWS**
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.
- SCREENS; Folding Draft**
The Stratford Mfg. Co., Limited, Stratford, Ont.
- SCREWS**
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.
*National Acme Company, Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton, Ont.
*Torrington Company, Limited, Upper Bedford, Que.
- SCREW PLATES**
*Butterfield & Co., Rock Island, P.Q.
- SEATS; Park and Grand Stand**
The Stratford Mfg. Co., Limited, Stratford, Ont.
- SECURITIES, engraved**
American Bank Note Co., Ottawa, Ont.
- SERGES**
Rosamond Woollen Co., Almonte, Ont.
- SEWAGE DISPOSAL SYSTEMS**
Anthes Foundry, Ltd., Toronto.
- SEWAGE SCREENS**
*The Hydraulic Machinery Co., Limited, Montreal.
- SHAFTING**
*Canadian Drawn Steel Co., Ltd., Hamilton, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
- SHANTY BLANKETS**
Slingsby Mfg. Co., Ltd., Brantford, Ont.
- SHAPERS**
*Canada Machinery Corporation, Ltd., Galt, Ont.
*P. B. Yates Machine Co., Ltd., Hamilton, Ont.
- SHEAR BLADES, iron**
*Galt Knife Co., Ltd.
The Peter Hay Knife Co., Ltd., Galt, Ont.
- SHEATHING**
*The Barrett Co., Ltd., Toronto and Montreal.
- SHEATHING, asbestos corrugated**
*Eureka Mineral Wool & Asbestos Co., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
- SHEET METAL STAMPINGS**
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
*The A. B. Ormsby Co., Ltd., Toronto, Ont.
- SHEETS, fibre**
*The Diamond State Fibre Co. of Canada, Ltd., Toronto.
- SHEETS, galvanized**
*Dominion Sheet Metal Co., Ltd., Hamilton, Ont.
*The Pedlar People, Ltd., Oshawa, Ont.
- SHINGLES**
*Bathurst Lumber Co., Ltd., Bathurst, N.B.
- SHINGLE SAWS**
*E. C. Atkins & Co., Inc., Hazelton, Ont.
- SHINGLE STAINS**
Sturgeons, Limited, Toronto.
- SHIP BUILDERS**
J. & R. Weir, Montreal, Que.
- SHIRTS**
John W. Peck & Co., Ltd., Montreal, Que.
- SHIRTS, workmen's**
*A. R. Clarke & Co., Ltd., Toronto.
- SHOE PEGWOOD**
O. Chalifour, Quebec, Que.
- SHOE LININGS**
Galt Knitting Co., Ltd., Galt, Ont.
- SHOOKS**
Barchard & Co., Ltd., Toronto.
- SIGNAL CELLS-RAILWAY**
*Canadian National Carbon Co., Ltd., Toronto.
- SILENT CHAIN DRIVES**
*Canadian Link-Belt Company, Ltd., Toronto, Ont.
- SILVER BULLION**
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
*Deloro Smelting & Refining Co., Ltd., Deloro, Ont.
- SILVERSMITH**
Standard Silver Co., Toronto, Ont.
- SILVERWARE, sterling**
Roden Bros., Ltd., Toronto, Ont.
- SINKS, enamelled**
Amherst Foundry Co., Ltd., Amherst, N.S.
- SKIFFS**
Peterboro Canoe Co., Ltd., Peterboro, Ont.
- SKYLIGHTS**
*A. B. Ormsby Co., Ltd., Toronto.
*The Pedlar People, Ltd., Oshawa, Ont.
- SLOTTERS**
*Canada Machinery Corporation, Ltd., Galt, Ont.
- SMOKE CONSUMERS**
*Under-Feed Stoker Company of Canada, Limited, Toronto.
- SMOKE-STACKS**
*Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, Limited, London, Ont.
*MacKinnon Steel Co., Ltd., Sherbrooke, Que.
*Steel Trough & Machine Co., Ltd., Tweed, Ont.
- SOAPS**
J. Barsalou & Co., Ltd., Montreal.
- SOAP (soft, oil)**
*The Imperial Varnish & Color Co., Ltd., Toronto, Ont.
- SODA ASH**
Brunner, Mond Canada, Limited, Amherstburg, Ont.
- SODA WATER FOUNTAINS**
J. J. McLaughlin, Ltd., Toronto.
- SODA WATER FOUNTAINS AND ACCESSORIES**
Fletcher Mfg. Co., Ltd., Toronto.
- SOIL PIPE**
Anthes Foundry, Ltd., Toronto.
- SOLDER**
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*Canada Metal Co., Toronto, Ont.
*Hoyt Metal Co., Toronto, Ont.
Magnolia Metal Co. of Canada, Ltd., Montreal, Que.
- SOLDER, silver**
Geo. H. Lees & Co., Hamilton, Ont.
- SOLDER, wire and bar**
American Can Co., Montreal, and Hamilton.
- SNOWSHOES**
Holt, Renfrew, Ltd., Quebec, Que.
- SPECIAL MACHINERY**
*Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- SPECIALTIES, SWAGED AND THREADED WIRE**
*Torrington Company, Limited, Upper Bedford, Que.
- SPELTER**
*Consolidated Mining & Smelting Co. of Canada, Ltd., Montreal.
- SPIRAL CONVEYORS**
*Canadian Mathews Gravity Carrier Co., Ltd., Toronto, Ont.
Dodge Manufacturing Co. of Canada, Ltd., Toronto.
- SPLIT PEAS**
H. Murton, Ltd., Guelph, Ont.
- SPOOLS**
Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.
- SPORTING MEDALS AND TROPHIES**
Roden Bros., Ltd., Toronto, Ont.
- SPEARERS**
Sparamotor Co., London, Ont.
- SPRING COTTERS**
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
- SPRINGS**
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
- SPRINGS, carriage and automobile**
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
- SPRING SHACKLE BOLTS**
*John Morrow Screw & Nut Co., Ltd., Ingersoll, Ont.

SPRINKLER SYSTEMS

- *Chicago Bridge & Iron Works, Bridgeburg, Ont.
- *The Bennett & Wright Co., Ltd., Toronto, Ont.
- *Purdy, Mansell, Ltd., Toronto.

SPROCKET WHEELS

- *Canadian Link-Belt Company, Ltd., Dodge Manufacturing Co. of Canada, Toronto, Ont.

STAINS, creosote shingle

- A. Muirhead Co., Ltd., Toronto.

STAMPS, steel, brass and rubber

- Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMPINGS, steel, brass, aluminum, etc.

- Larsen & Shaw, Ltd., Walkerton.

STATIONERY, office

- Harris Lithographing Co., Toronto.

STEAM PIPE AND BOILER COVERINGS, asbestos

- *Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS

- *Canadian Mead Morrison Co., Ltd., Montreal, Que.

STEAM SPECIALTIES

- *C. A. Dunham Co., Ltd., Toronto.

STEAM TRAPS

- *C. A. Dunham Co., Ltd., Toronto.

STEEL

- *Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
- *Burlington Steel Co., Ltd., Hamilton, Ont.
- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.

STEEL BILLETS AND BLOOMS

- *The Steel Co. of Canada, Ltd., Hamilton, Ont.

STEEL BUILDINGS

- *The Canadian Bridge Co., Ltd., Walkerville, Ont.
- *Dominion Bridge Co., Ltd., Montreal, Que.
- *Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
- *Maritime Bridge Co., Ltd., New Glasgow, N.S.
- *McGregor & McIntyre, Ltd., Toronto, Ont.
- *MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
- *The Pedlar People, Ltd., Oshawa, Ont.
- *The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL CASTINGS

- Beauchemin & Fils, Ltd., Sorel, Que.
- *Canadian Steel Foundries, Ltd., Montreal, Que.
- *Dominion Foundries and Steel Co., Ltd., Hamilton, Ont.
- *Electric Steel & Metals Co., Ltd., Welland, Ont.

STEEL DOORS, rolling

- *The A. B. Ormsby Co., Ltd., Toronto, Ont.

STEEL FILING EQUIPMENT

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

STEEL LATH

- *Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL PLATE WORK

- *Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
- *Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
- *Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
- *MacKinnon Steel Co., Limited, Sherbrooke, P.Q.
- *Toronto Iron Works, Ltd., Toronto.

STEEL RODS

- *The Steel Co. of Canada, Ltd., Hamilton, Ont.
- *Algoma Steel Corporation.

STEEL SASH

- *Canadian Metal Window & Steel Products, Limited, Toronto.
- *Dennis Wire & Iron Works Co., London, Ont.
- *The A. B. Ormsby Co., Ltd., Toronto, Ont.
- *Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

STEEL SHELVING

- *Dennis Wire & Iron Works Co., London, Ont.

STEEL WIRE RODS

- *The Steel Co. of Canada, Ltd., Hamilton, Ont.

STELLITE

- *Deloro Smelting & Refining Co., Ltd., Deloro and Toronto.

STENCILS, brass

- Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEEBOTYPING

- Central Press Agency, Toronto.

STOKERS

- *Under-feed Stoker Co. of Canada, Ltd., Toronto, Ont.

STOOLS, steel factory

- *Steel Trough & Machine Co., Ltd., Tweed, Ont.

STORAGE BATTERIES

- *Prest-O-Lite Company of Canada, Limited, Toronto.

STORE FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES

- Smith Foundry Co., Ltd., Fredericton, N.B.

STOVE POLISH GRAPHITE

- Black Donald Graphite Company, Limited, Calabogie, Ont.

STOVES AND RANGES

- *McClary Mfg. Co., London, Ont.

STRAWS, paper drinking

- Fletcher Mfg. Co., Ltd., Toronto.

STRUCTURAL STEEL

- *Algoma Steel Corporation.

STRUCTURAL STEEL WORK

- *Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- *Dominion Bridge Co., Montreal.
- *Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
- *McGregor & McIntyre, Ltd., Toronto, Ont.
- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.
- *The Canadian Bridge Co., Ltd., Walkerville, Ont.

SUIT CASES

- J. Eveleigh & Co., Ltd., Montreal
- *The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto, Ont.

SULPHUR BURNERS

- *The Hydraulic Machinery Co. Limited, Montreal.

SUPERHEATERS, steam

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

SUPERHEATERS, STEAM (Locomotive, Marine, Stationary)

- The Superheater Company, Limited, Transportation Building, Montreal, Quebec.

SUPPLY DEALERS

- *The Foundation Co., Ltd., Montreal, Que.

SURFACERS

- *Canada Machinery Corporation, Ltd., Galt, Ont.
- *P. B. Yates Machine Co., Ltd., Hamilton, Ont.

SWITCHES, railway

- Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS

- *Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS

- Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

TABLE COVERS, chenille

- Hamilton Cotton Co., Hamilton, Ont.

TANKS

- *Canadian Chicago Bridge & Iron Company, Ltd., Bridgeburg, Ont.
- *Canadian Des Moines Steel Co., Limited, Chatham.
- *Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
- *E. Leonard & Sons, Ltd., London, Ont.
- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.
- *Maritime Bridge Co., Ltd., New Glasgow, N.S.
- *Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *The Gould Shapley & Muir Co., Limited, Brantford, Ont.
- *The Watrous Engine Works Co., Ltd., Brantford, Ont.
- *Toronto Iron Works, Ltd., Toronto.
- Wm. H. White, Ville St. Pierre, Montreal, Que.

TANKS, elevated steel

- *Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
- *Canadian Des Moines Steel Co. Limited, Chatham.

TANKS, steel storage

- *Canadian Ingersoll Rand Co., Ltd., Sherbrooke, Que.
- *Canadian Chicago Bridge & Iron Co., Ltd., Bridgeburg, Ont.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *MacKinnon Steel Co., Ltd., Sherbrooke, Que.
- *Steel Trough & Machine Co., Ltd., Tweed, Ont.

TANNERS' OILS & GREASES

- Salem Oil & Grease Co. of Canada, Limited, Farnham, Que.

TANNERS' SUPPLIES

- *McClary Mfg. Co., London, Ont.

TAPS

- *Butterfield & Co., Rock Island, P.Q.
- *Pratt & Whitney Co., Dundas, Ont.

TAPES, measuring

- The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

TELEPHONE ACCESSORIES

- *Northern Electric Co., Ltd., Montreal, Que.

TERMINALS, electric cable

- *Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

TERRA COTTA, architectural

- Toronto Plate Glass Importing Co., Ltd., Toronto, Ont.

TEXTILE SUPPLIES (shuttles, bobbins, spools and picker sticks)

- The Lachute Shuttle Co., Ltd., Lachute Mills, P.Q.

TIE TAMPERS

- *Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TILING, rubber

- *Gutta Percha & Rubber Ltd., Toronto, Ont.

TIME RECORDERS

- *International Business Machines Co., Ltd., Toronto, Ont.

TINWARE, lithographed

- *MacDonald Mfg. Co., Ltd., Toronto, Ont.

TIRES, bicycle, auto, carriage, truck, motorcycle

- *Gutta Percha & Rubber Ltd., Toronto, Ont.

TOOLS, pneumatic

- *Canadian Ingersoll-Rand Co., Ltd., Montreal, Que.

TOOLS, track

- B. J. Coglin Co., Ltd., Hamilton.

TOYS AND GAMES.

- A. C. Gilbert-Menzies Co., Ltd., Toronto, Ont.

TRADE MARKS AND PATENT INVESTIGATIONS

- Harold C. Shipman & Co., Ottawa, Ont.

TRADE MARKS AND DESIGNS

- *Ridout & Maybee, Toronto, Ont.

TRAFFIC SERVICES

- National Traffic Service Association of Canada, Toronto.

TRANSFORMERS

- *The Canadian Crocker-Wheeler Co., Ltd., St. Catharines, Ont.

TRANSLATIONS INTO FRENCH

- Raoul Renault, Quebec City.

TRANSMISSION MACHINERY

- *Bond Engineering Works., Limited, Toronto.
- *Canadian Link Belt Co., Toronto.
- *The Watrous Engine Works Co., Ltd., Brantford, Ont.

TRAPS

- *C. A. Dunham Co., Ltd., Toronto.

TROLLEYS

- *Richard-Wilcox Canadian Co., Ltd., London, Ont.
- *Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS

- *Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
- *Northern Crane Works, Ltd., Walkerville, Ont.

TRUCKS, brick, tile and lumber

- *Watrous Engine Works Co., Ltd., Brantford, Ont.

TRUCKS, motor

- Mapleleaf Manufacturing Comp., Ltd., Montreal, Que.
- *National Steel Car Co., Ltd., Hamilton, Ont.

TRUCKS FOR OFFICE AND VAULT USE

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

TRUNKS

- Lamontagne, Ltd., Montreal, Que.
- J. Eveleigh & Co., Ltd., Montreal.
- *The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

TUBES, ice cream

- Fletcher Mfg. Co., Ltd., Toronto.

TUBING, brass and copper

- *Booth-Coulter Copper & Brass Co., Ltd., Toronto, Ont.
- Canadian Seamless Wire Co., Toronto, Ont.
- *Copper Products, Ltd., Montreal, Que.

TUBING, gold and silver

- Canadian Seamless Wire Co., Toronto, Ont.

TUMBLERS, foundry

- *Northern Crane Works, Ltd., Walkerville, Ont.
- *Smart-Turner Machine Co., Ltd., Hamilton, Ont.

TURBINES, hydraulic

- *Dominion Engineering Works, Limited, Montreal, Que.

TURBINES, steam

- *The Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

TURBINE PUMPS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

TWEEDS

- Rosamond Woollen Co., Almonte, Ont.

TWINES

- *Doon Twines, Limited, Kitchener, Ontario.
- *Shurly & Derrett, Ltd., Toronto.

TWINES, binder

- Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton

- Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS

- *John Morrow Screw & Nut Co., Ltd., Ingersoll.
- *Pratt & Whitney Co. of Canada, Dundas, Ont.

UNDERWEAR

- Galt Knitting Co., Ltd., Galt, Ont.

UNIONS

- *Dart Union Co., Ltd., Toronto.

UPHOLSTERED FURNITURE,

- leather and tapestries
- Imperial Rattan Co., Ltd.

VACUUM PUMPS

- *Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

VALVES

- *Canadian Fairbanks-Morse Co., *Kerr Engine Co., Ltd., Walkerville, Ltd., Montreal, Que.
- *Jenkins Bros., Ltd., Montreal, Que.

VALVES, for steam and water

- *Jenkins Bros., Ltd., Montreal.
- *James Morrison Brass Mfg. Co., Ltd., Toronto, Ont.

VALVES, REDUCING

- *Mason Regulator & Engineering Co., Ltd., Montreal, Que.

VAULT FITTINGS, steel

- *Office Specialty Mfg. Co., Ltd., Newmarket, Ont.

VAULTS AND VAULT DOORS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

VENTILATORS

- *A. B. Ormsby, Ltd., Toronto, Ont.
- *The Pedlar People, Ltd., Oshawa, Ont.

WALLPAPERS

- *Staunton Limited, Toronto.

WALLBOARD, SHEATHING,

- *Beveridge Supply Co., Limited, Montreal, Que.

WASHERS

- *The Steel Co. of Canada, Ltd., Hamilton, Ont.

WASHERS, fibre

- *The Diamond State Fibre Co. of Canada, Ltd., Toronto.

WASHERS, plate or wrought

- *London Rolling Mill Co., Ltd., London, Ont.

WASTE BASKETS, fibre

- *The Diamond State Fibre Co. of Canada, Ltd., Toronto.

WASTES, wool and cotton

- *Factory Waste & Metal Co., Montreal, Que.

WATERPROOF, cement coating

- *Benjamin Moore & Co., Ltd., Toronto, Ont.
- *Beveridge Supply Co., Ltd., Montreal, Que.
- *The Barrett Co., Ltd., Toronto and Montreal.

WATERPROOF, caselining

- *Beveridge Supply Co., Limited, Montreal, Que.

WATER PAINTS

- *Sturgeons Limited, Toronto.

WEBBING, elastic

- *Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic

- *Hamilton Cotton Co., Hamilton, Ont.

WELDING APPARATUS AND MATERIALS

- *The Presto-O-Lite Co., Toronto.

WELL-DIGGING TOOLS AND MACHINERY

- *Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WHEELS, corundum and emery

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

WELL DRILLING TOOLS AND MACHINERY

- *Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES

- *Lay Whip Co., Rock Island, Que.

WHITE ARSENIC

- *Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE LEAD

- *A. Ramsay & Son Co., Montreal.

WINDMILLS

- *Ontario Wind Engine & Pump Co., Ltd., Toronto, Ont.

WINDOW SASH

- *Trussed Concrete Steel Company of Canada, Ltd., Walkerville, Ont.

WIRE

- *The Steel Co. of Canada, Ltd., Hamilton, Ont.
- *Laidlaw Bale-Tie Co., Ltd., Hamilton, Ont.
- *Frost Steel & Wire Company, Limited, Hamilton, Ontario.

WIRE BALE TIES

- *Frost Steel & Wire Co., Limited, Hamilton, Ontario.
- *Laidlaw Bale-Tie Co., Ltd., Hamilton, Ont.

WIRE CLOTH

- *Canada Wire & Iron Goods Co., Hamilton, Ont.
- *B. Greening Wire Co., Limited, Hamilton, Ont.
- *C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley

- *Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

WIRE GUARDS

- *Canada Wire & Iron Goods Co., Hamilton, Ont.
- *B. Greening Wire Co., Limited, Hamilton, Ont.
- *C. H. Johnston & Sons, Limited, Montreal, Que.

WIRE, insulated electric

- *Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

WIRE ROPE

- *Canada Wire & Iron Goods Co., Hamilton, Ont.
- *Dominion Wire Rope Co., Ltd., Montreal, Que.
- *The B. Greening Wire Co., Ltd., Hamilton, Ont.

WIRE, weatherproof

- *Standard Underground Cable Co. of Canada, Ltd., Hamilton, Ont.

WIRE WORK

- *C. H. Johnston & Sons, Limited, Montreal, Que.
- *Canada Wire & Iron Goods Co., Hamilton, Ont.
- *The Geo. B. Meadows, Toronto Iron & Brass Goods Works Co., Ltd., Toronto, Ont.

WOOD

- *Standard Fuel Co., Toronto, Ont.

WOOD BORERS

- *Canadian Ingersoll-Rand Co., Ltd., Sherbrooke, Que.
- *Canada Machinery Corporation, Ltd., Galt, Ont.

WOOD PRESERVATIVES

- *Sturgeons Limited, Toronto.

WOOD PRINTERS

- *Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical

- *La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.

WOOD SHOP, general work

- *Canadian Rumely Co., Ltd., Toronto, Ont.

WOOD SPLIT PULLEYS

- *Dodge Mfg. Co., Ltd., Toronto.

WOOL

- *H. V. Andrews, Toronto, Ont.

WOOD TURNING

- *Canada Spool & Bobbin Co., Ltd., Walkerton, Ont.

WORSTED COATINGS AND SUITINGS

- *Rosamond Woollen Co., Almonte, Ont.

WRAPPERS, book, bottle, etc.

- *Thompson & Norris Co., of Canada, Ltd., Toronto and Montreal.

WROUGHT IRON PIPE

- *The Steel Co. of Canada, Ltd., Hamilton, Ont.

YARNS, cotton

- *Hamilton Cotton Co., Hamilton, Ont.

ZINC

- *Consolidated Mining and Smelting Co., of Canada, Ltd., Montreal, Que.

ZINC, electrical

- *The Canada Metal Co., Toronto.

STEEL TUBING

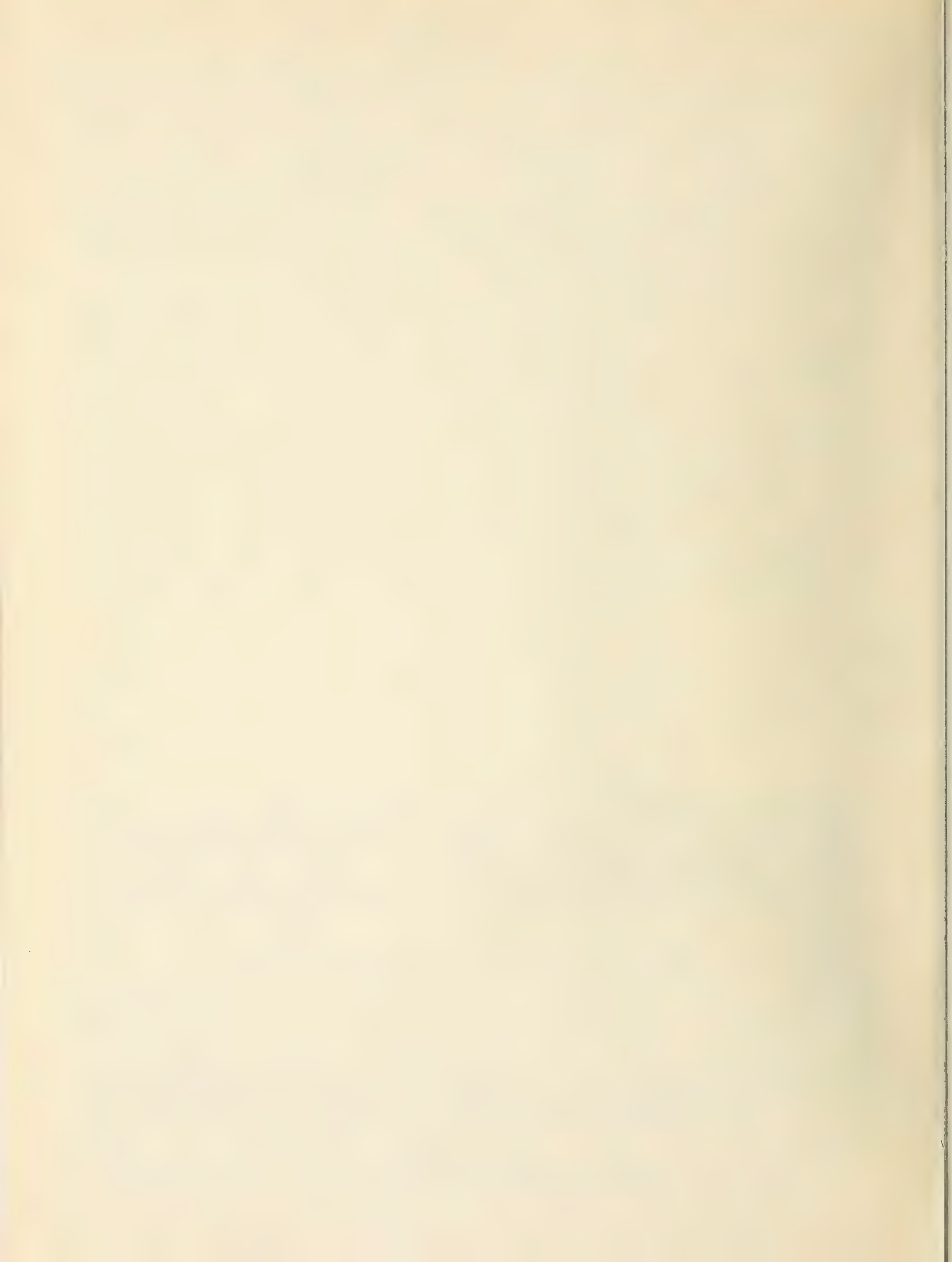
CLOSE JOINT AND WELDED STEEL TUBING

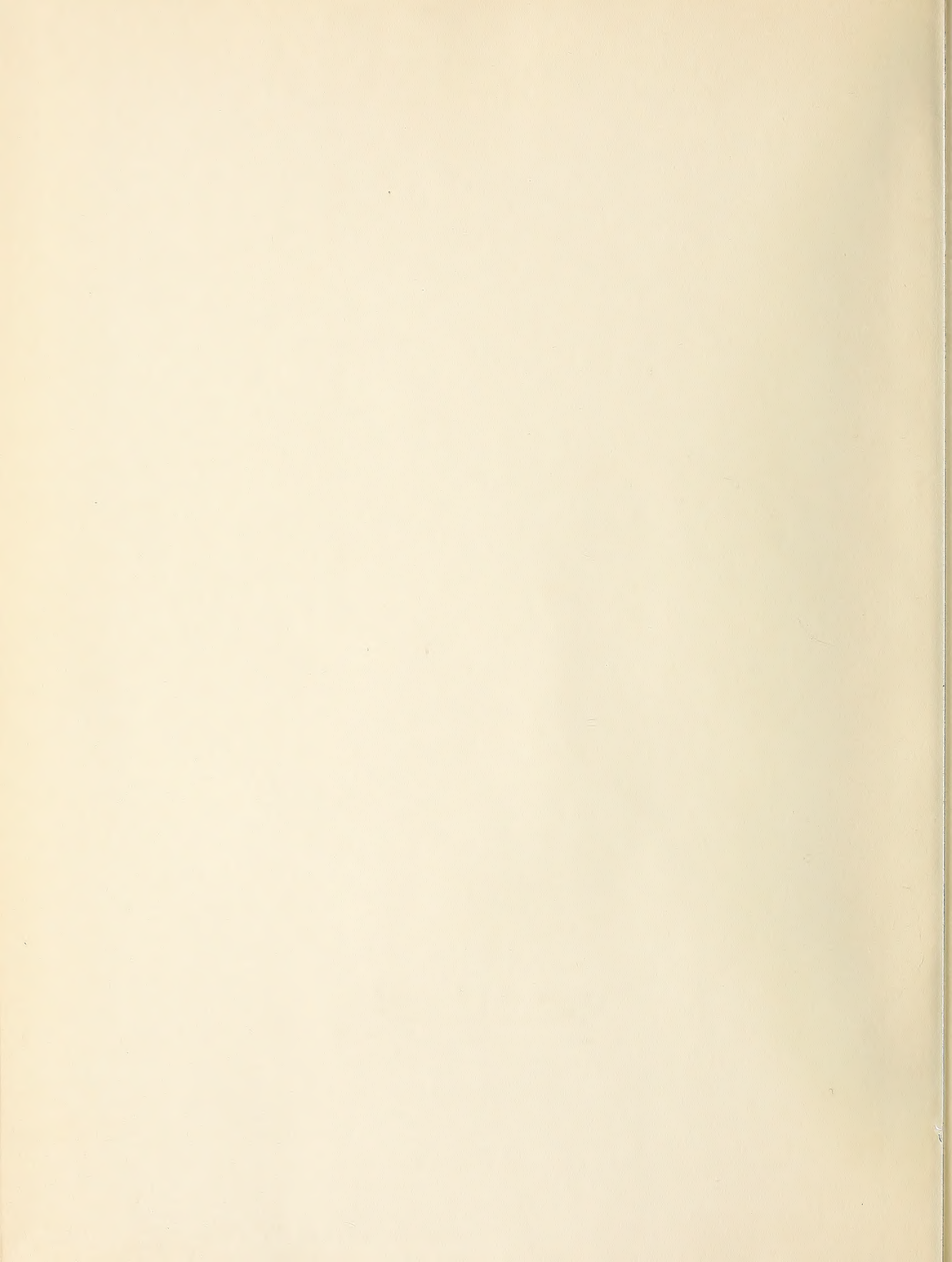
Hot and Cold Rolled

All Sizes and Gauges Special Tubular Shapes

STANDARD TUBE COMPANY LIMITED

Woodstock, Ont.





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